

BUSINESS WEEK

INDEX
PAGE 22

INDEX
YEAR
AGO



Fred L. Maytag II: Shooting for the top of the market (page 108)

A McGRAW-HILL PUBLICATION

OCT. 9, 1954



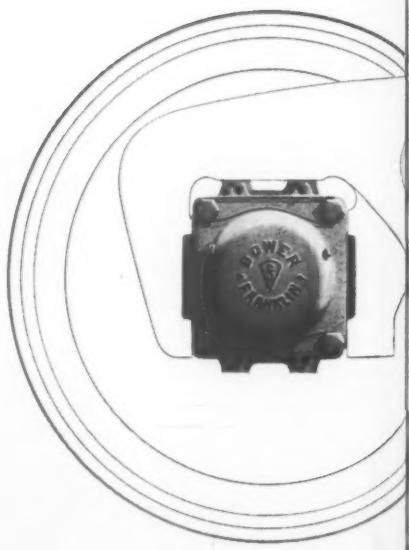


MAKING BETTER TIME...now that the heat's off!

The old-timer is exceedingly proud of his railroad—and with justice! Time was when the freights were a lot shorter—and slower! That was before the bearing industry, in cooperation with railway equipment engineers, virtually eliminated the troublesome "hot-box" with modern, anti-friction roller bearing journal boxes. ☆ And now, Bower roller bearings are available to America's railroads to help them carry more payload at greater speeds. Supplied by the Franklin Balmar Corporation, Bower-Franklin journal boxes are equipped with dependable Bower straight roller bearings. These high-quality bearings have already proved themselves in numerous other types of heavy-duty equipment—steel rolling mills, heavy trucks, earthmovers, cranes, shovels and railroad generator drive units, to mention but a few. ☆ Whatever your product, if it uses bearings, contact Bower now! Experienced engineers will show you a complete line of tapered, straight and journal roller bearings.

BOWER ROLLER BEARING COMPANY • DETROIT 14, MICHIGAN

BOWER
ROLLER BEARINGS





"Vision is Indispensable to Progress"

How an aluminum kettle mirrored the shape of things to come

Today they sheath skyscrapers with aluminum. It's an important metal in airplanes, ships, trains, trucks and busses. Slender aluminum cables share the job of carrying America's light and power.

These are only a few of the more than 4,000 uses of this "Twentieth Century Metal"—all stemming directly from the gleaming tea-kettle which in 1891 was the first product of an aluminum foundry.

From that tea-kettle to modern industrial uses was an inevitable step. With new fabricating techniques, lower prices, and a ready supply of

raw material in the bauxite ore which makes up eight percent of the earth's surface, aluminum earned quick acceptance.

Light but strong, corrosion resistant, a good conductor, easily workable, it has become a key material in the transportation, building, electrical, packaging, hardware, and appliance industries. From stoves to

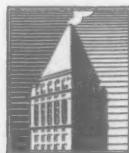
steam shovels, camera films to beer barrels, a metal for today—and tomorrow. In 1954—a U.S. capacity of 1,500,000 tons; twenty years from now—4,500,000 tons.

Aluminum—an example of the progress attained by men of vision working together and another great contributor to America's steady development.

BANKERS TRUST COMPANY

16 WALL STREET, NEW YORK 15, N. Y.

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION





Rebirth of a telephone!

TELEPHONES FOR THE BELL SYSTEM are made at Western Electric . . . and also made new again. Here's one of our men testing a batch of reconditioned pay telephones in one of Western Electric's 29 repair centers. One of these centers is right in the territory of your own Bell telephone company.

Cleaned, checked, and repaired if necessary, veteran telephones are refinished and sent back for additional years of good service. Last year some 4,500,000 telephones of all kinds were "reborn." And the cost to your Bell telephone company? Less than one-quarter

the cost of new telephones. That means quite a saving, but we also help your telephone company make savings by repairing switchboards, booths and many other kinds of equipment.

If we didn't work so hard to find ways to repair things, maybe sales of the *new* telephone equipment we make would go up . . . but that wouldn't necessarily be best for telephone users. Being part of the Bell System we share the same aim as your Bell telephone company: to furnish the best possible service at the lowest possible cost to telephone users.

Western Electric



MANUFACTURING AND SUPPLY UNIT OF THE BELL SYSTEM

BUSINESS WEEK

EDITOR & PUBLISHER Elliott V. Bell
MANAGING EDITOR Kenneth Kramer

ASSISTANT MANAGING EDITOR Robert B. Colborn
ASSOCIATE MANAGING EDITOR John L. Cobbs
ASSOCIATE MANAGING EDITOR Peter French

DEPARTMENTS

Business Outlook: Clark R. Pace, *Editor*; Robert H. Persons, Jr.
Commodities: Gertrude Charloff, *Editor*
Finance: William McKee Gillingham, *Editor*; Paul D. Gesner, David B. Carlson
Foreign: Howard Whidden, *Editor*; Paul R. Miller, Jr.
Industrial Production: Charles M. Garvey, *Editor*; George J. Gray, Jr., David C. Allison
Labor: Merlin S. Pitzele, *Editor*; Edward T. Townsend
Management: Richard L. Waddell, *Editor*; Richard M. Wight
Marketing: Carl Rieser, *Editor*; Cora Carter, John C. L. Donaldson
Personal Business: Guy Shipley, Jr., *Editor*; Ann Masse
Regions: Richard M. Machol, *Editor*
Research: John K. Fockler, *Editor*
Illustration: Harry Jensen, Kate McSweeney, *Editors*; Robert Isear (*Pictures-Photography*), Bernard R. Clorman, Herbert F. Kratovil, Jomary Mosley, Arthur Richter
Special Projects: Frank J. Fogarty
Statistics: Elsa Denno
The Trend: M. J. Rossant
Library: Dorothy Roantree, *Librarian*; Emily Cherry, Ruth Callanan
Assistant to the Editor & Publisher: John F. Hartshorne

NEWS EDITORS

T. B. Crane (*Senior News Editor*), Robert F. Deed, D. A. Drennen, Maxwell D. Gunther, Lawrence H. Odell, Doris I. White

EDITORIAL ASSISTANTS

Mary T. Beckerle, Edward J. Burgess, Jr., Mary M. Burgess, Jean Drummond, Barbara Kleban, Alice Marks, Jacqueline M. Pitcher

ECONOMICS STAFF

Dexter M. Keezer, *Director*; William H. Chartener, Peter J. Davies, Richard Everett, Douglas Greenwald, Margaret Matulis, Dora K. Merris, Robert P. Ulin

DOMESTIC NEWS SERVICE

Atlanta Bureau: Wm. H. Kearns, *Manager*
Boston Bureau: Paul Finney, *Manager*
Chicago Bureau: James M. Sutherland, *Manager*; Mary B. Stephenson, Dorothy Miller
Cleveland Bureau: Robert E. Cochran, *Manager*; Jean H. Henderson, Wm. N. Troy
Detroit Bureau: William Kroger, *Manager*; Susan Tower
Houston Bureau: Eugene Miller, *Manager*; Mary Schiflett
Los Angeles Bureau: Thomas M. Self, *Manager*; Lorraine M. Lemmon
Philadelphia Bureau: W. B. Whichard, Jr., *Manager*; Esther A. Schultz
Pittsburgh Bureau: Richard N. Larkin, *Manager*
San Francisco Bureau: Richard Lamb, *Manager*; Joanne O'Brien
Toronto Bureau: Werner Renberg
Washington Bureau: George B. Bryant, Jr., *Manager*; Glen Bayless, Alan E. Adams, Carter Field, Jay Flocken, Boyd France, William Gilmour, Sam Justice, Donald O. Loomis, Gladys Montgomery, Arthur L. Moore, E. William Olcott, Morton A. Reichek, Caroline Robertson, John T. Skelly, Vincen Smith
Correspondents: Akron, Albany, Austin, Baltimore, Birmingham, Buffalo, Charleston, Charlotte, Cincinnati, Columbus, Dallas, Denver, Des Moines, Duluth, Fort Worth, Greensboro, Hartford, Jacksonville, Kansas City, Knoxville, Little Rock, Louisville, Memphis, Miami, Milwaukee, Minneapolis, Nashville, New Orleans, Oklahoma City, Omaha, Orono, Phoenix, Portland (Ore.), Providence, Richmond, Rochester, Salt Lake City, San Antonio, San Diego, Seattle, St. Louis, Syracuse, Toledo, Wilmington, Worcester, Honolulu. **Correspondent Relations:** Dorothea Schmidt

FOREIGN NEWS SERVICE

Editor: Joseph K. Van Denburg, Jr.
Bonn: Gerald W. Schroder
London: Edward W. S. Hull
Manila: Herbert Leopold
Correspondents: Amsterdam, Athens, Bangkok, Beirut, Belgrade, Bogota, Bombay, Brussels, Buenos Aires, Cairo, Caracas, Ciudad Trujillo, Copenhagen, Djakarta, Durban, Geneva, Guatemala City, Havana, Helsinki, Istanbul, Johannesburg, Karachi, La Paz, Lima, Madrid, Melbourne, Oslo, Ottawa, Panama City, Quito, Reykjavik, Rome, Salzburg, San Juan, San Salvador, Santiago, Stockholm, Sydney, Tehran, Tel Aviv, Wellington, Winnipeg.

ADVERTISING DIRECTOR Herman C. Sturm

ADVERTISING MANAGER John M. Holden

BUSINESS MANAGER Richard E. McGraw

BUSINESS WEEK • OCT. 9 • NUMBER 1310

(with which are combined *The Annalist* and the *Magazine of Business*) is published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder, *Editor*, *Publisher*, *122 East 42nd Street, New York, N. Y.* Editorial Executive and Advertising Offices: *330 West 42nd St., New York 36*, *or* Donald C. Brown, *Managing Editor*; William Chevalier, *Executive Vice-President*; Joseph A. Gannett, *Vice-President and Treasurer*; John J. Cooke, *Secretary*; Paul Montgomery, *Executive Vice-President*; *Subscription Manager*; Philip B. Miller, *Vice-President and Editorial Director*; Nelson Bond, *Vice-President and Director of Advertising*. *Subscriptions:* Address correspondence regarding subscriptions to J. E. Blackburn, Jr., Vice-

President and Director of Circulation, *Business Week*, 99-120 Broadway, Albany 1, N. Y., or 330 West 42nd St., New York 36. Allow one month for change of address. *Subscriptions to Business Week* are solicited only from persons engaged in business and industry. *Position and company connection* must be indicated on subscription orders. *Subscription rates:* United States and possessions \$6.00 a year; \$12.00 for three years. Canada \$7.00 a year; \$14.00 for three years. Mexico \$7.00 a year; \$14.00 for three years. Australia \$12.00 a year; \$30.00 for three years. The Philippines \$15 a year; \$30.00 for three years. All other countries \$25 a year; \$50.00 for three years. *Postage:* Add 50¢ a year for three years. *Change of address:* Notify Postmaster Dec. 4, 1938, at the Post Office at Albany, N. Y., under Act of Mar. 3, 1879. *Printed in U. S. A.* Copyright 1954 by McGraw-Hill Publishing Co., Inc. *All Rights Reserved.*

To back your product with proved results always depend on

ENJAY

PETROLEUM CHEMICALS



in Chemicals...



in Surface Coatings...



in Petroleum



34 successful years of leadership in serving industry with a complete line of high quality petroleum chemicals.

ENJAY COMPANY, INC.



ANOTHER



FIRST!

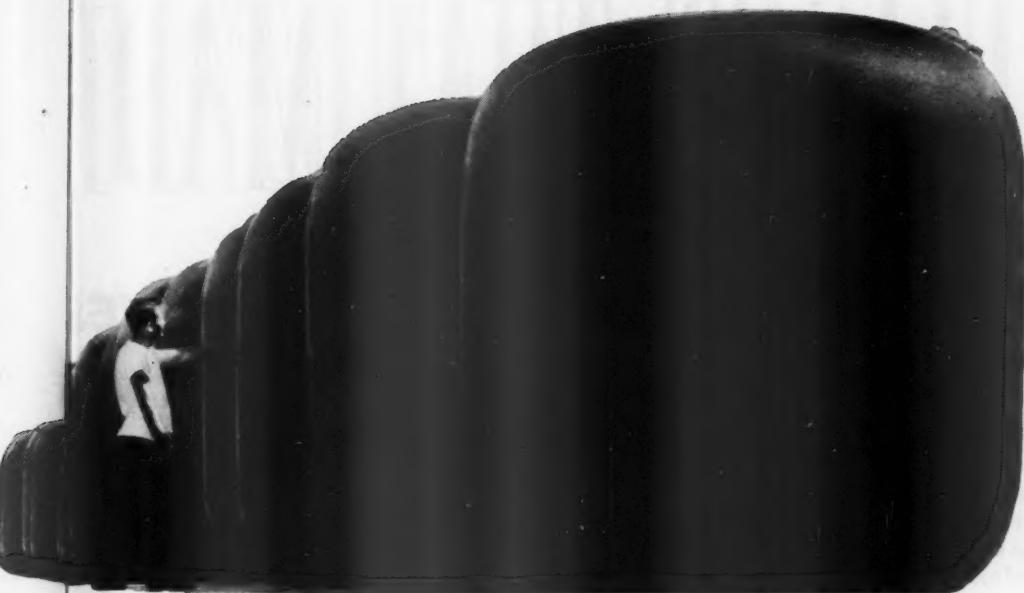
the new

U. S. SEALD-BIN

**has started a
Revolution in Bulk Materials
Handling, Shipping and
Storing!**



BULK SHIPPING of materials is now safe in uncovered trucks, cars or barges. You save on lower transportation and insurance rates. For return, SEALD-BINS fold to 1/10 size.



BULK STORING in U. S. SEALD-BINS requires no warehousing space, either before shipping or while awaiting use. Contents are safe in open storage.

Here is an entirely new concept of bulk handling, bulk shipping and bulk storing of flowable solid materials. For here is *low cost* combined with *complete protection* to the lading—from production to final use—all in the same bulk container!

We call this "closed" materials handling method the U. S. SEALD-BULK System. The unique and thoroughly patented collapsible container that makes it possible is the U. S. SEALD-BIN.

Built of synthetic rubber and fabric, similar to a tire, the U. S. SEALD-BIN is tough, non-corrosive, vermin-proof, moisture-proof and tamper-proof. It is engineered

for handling by means of a top lift eye from which a patented internal cable assembly extends the load-carrying support to the bottom. Both the large 300 cu. ft. (4 to 12 tons capacity, depending on weight per cu. ft. of the lading) and the smaller 70 cu. ft. (1 to 5 tons capacity) SEALD-BINS are inflated after filling—either with air or, in the case of oxygen-sensitive lading, with an inert gas.

The U. S. SEALD-BULK System provides totally new opportunities to cut costs of packaging and shipping, reduce man-hours, and eliminate warehousing and loss of materials. For the complete savings story, write or phone for an illustrated descriptive booklet.



BULK HANDLING of 300 cu. ft. of flowable solids at one time takes a man and a standard lift truck only a few minutes.



**UNITED STATES
RUBBER COMPANY**
CONTAINER PRODUCTS DIVISION
Providence, R. I.

THE FLIGHT THAT MADE IT

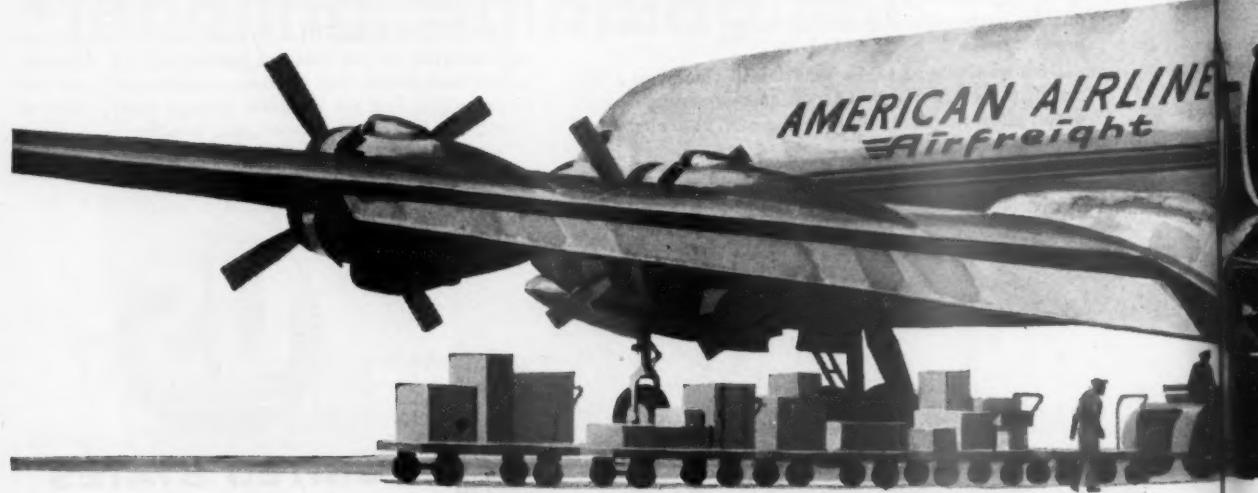
10 YEARS AGO, AMERICAN AIRLINES THE WORLD'S FIRST SCHEDULED AIR

On October 15th, 1944, businessmen found a new way to send their wares to market when an American Airlines DC-3 flew the first flight of the first scheduled airfreight service. Though the event could not compete with the war headlines of the day, it did make news—and good news—to those seeking better methods of distribution.

In the first full year of operation alone, American Airlines delivered more than 2,500,000 pounds of cargo consisting mainly of fish, flowers and pharmaceuticals. Succeeding years saw impressive gains in both volume and variety as well as American's introduction of the first all cargo aircraft to be employed in scheduled freight opera-

tions. Today—with ponderous as well as perishable products moving daily by air, the amount of freight carried by American in 1954 is expected to exceed 100,000,000 pounds—again establishing American as the leading carrier of Air Cargo.

With service to leading industrial centers throughout the United States, American Airlines Airfreight is an industry-wide offering whose full potential can only be measured by the imaginations of those who explore and employ its services. American Airlines, Cargo Sales Division, 100 Park Avenue, New York 17, New York.



AMERICAN AIRLINES INC.

America's Leading Airline



October 15th, 1944—An American DC-3 makes the FIRST scheduled cargo flight.

HISTORY—but not the Front Pages!

ANNOUNCED THE AIRFREIGHT SERVICE

le products
carried
000,000
ing car-

oughout
s an in-
only be
ore and
es Divi-

INE

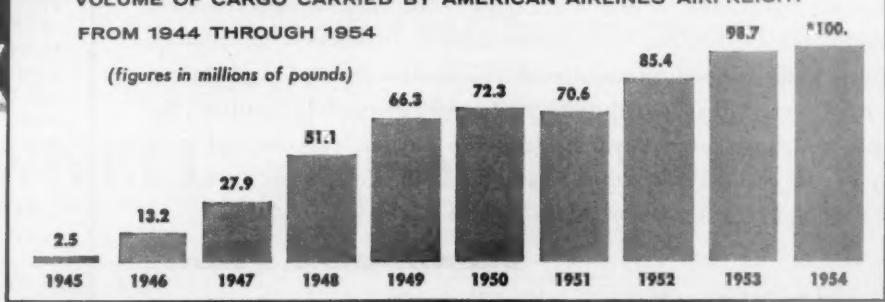
2.



VOLUME OF CARGO CARRIED BY AMERICAN AIRLINES AIRFREIGHT

FROM 1944 THROUGH 1954

(figures in millions of pounds)



*estimate



The new Remington Rand Adding Machine is the best!
 Wherever figurework output — accuracy — and ease of operation are essential, the All-Electric is the perfect answer. In offices large or small, this super-efficient adding machine offers a positive method of producing more figurework-per-hour through these two outstanding features: the 10-key touch-operated keyboard and the 2-color, easy-to-read tape that can be checked for accuracy and filed for reference.

For complete information, write for free booklet No. AD567.

Remington Rand

Room 2072, 315 Fourth Avenue, New York 10, N. Y.

8

READERS REPORT

Operation Snowflake

Dear Sir:

Inasmuch as you had an article on U. S. Steel's major appliance promotion for Christmas . . . (BW—Aug. 28 '54, p72), we thought you might be interested in the reception that this promotion is getting from appliance manufacturers.

I personally have presented the details . . . to sales and advertising executives of eighteen manufacturers. . . . In each office visited not only were the comments very enthusiastic but behind them obviously there was already thinking as to how the individual company could tie in with this promotion. . . .

While speaking of promotions, I would like to thank you for the inadvertent promotion to Vice President that you gave me in the article. . . . My associates and myself got a good laugh out of it. . . .

GEORGE C. SHENK

PROJECT MANAGER
 U. S. STEEL CORP.
 PITTSBURGH, PA.

Geography Lesson

Dear Sir:

For the past 11 years I have been a subscriber to BUSINESS WEEK, and have enjoyed reading it each week with the feeling that it was about as accurate and timely as any publication of its type could be.

But . . . inaccuracies occurred in your Sept. 4 issue. . . . On page 131 you generously donate Portland's leading florist, Tommy Luke, to Seattle. That, of course, can happen to any magazine—in fact, other publications have been known to bodily lift Oregon scenic attractions, especially Crater Lake, completely out of the state.

But you compound the felony on page 143 by stating that the Hawthorne Bridge is at the upper left of the picture accompanying the article on Portland. Actually, the Hawthorne Bridge does not even appear in your picture. If the picture were a little larger, the Hawthorne Bridge would be to the right—or upstream—of the Morrison Bridge—which you do correctly locate. The bridge at the upper left of the picture is actually the Steel Bridge. . . .

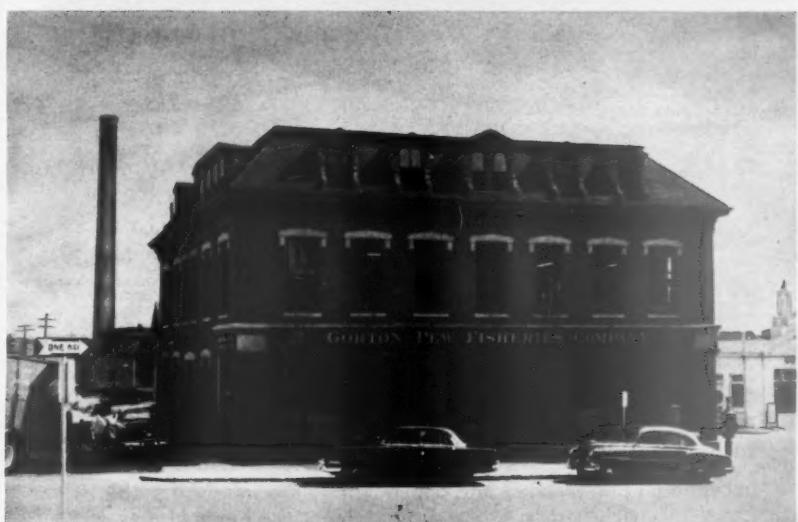
S. L. GREGORY
 POPE & TALBOT, INC.
 PORTLAND, ORE.

• We plan to send the editor who moved the bridge in our story out

When fire struck...

why weren't
both plants

NET LOSSES?



While fireboats waited for rising tide to battle the blaze with salt water, flames destroyed the two-block long West Coast fish cannery shown in the top picture. The fire, fed by fish oil, caused an estimated \$300,000 loss.

At the Gorton-Pew Fisheries Company, Gloucester, Mass., fire broke out in a closet of the "fish house" section of one of the buildings—at 12:30 A. M.! But by the time firemen arrived, the Grinnell Automatic Sprinkler System had it under control. Only the interior of the closet was damaged! *You may not be in the fish packing business. But fire can strike any plant, at any time.*

Grinnell Sprinklers stop fire at its source, wherever and whenever it strikes, night or day, with automatic certainty. 76 years experience proves this. And now, with the new Grinnell Automatic Spray Sprinklers, you get even greater protection against fire. *Less water puts out more fire.*

The time to act on Grinnell Protection is now . . . before fire burns you out. Remember, a Grinnell Sprinkler System often pays for itself in a few years through reductions in insurance premiums. So, if you have fire insurance, you're probably paying for Grinnell Fire Protection anyway . . . *why not have it?* For complete details, mail coupon.



GRINNELL
PROTECTION AGAINST EVERY FIRE HAZARD

Manufacturing, Engineering and Installation of
Automatic Sprinklers Since 1878



GRINNELL COMPANY, INC.
265 West Exchange Street, Providence, Rhode Island

Please send me your new illustrated booklet, "Grinnell Automatic Spray Sprinklers".

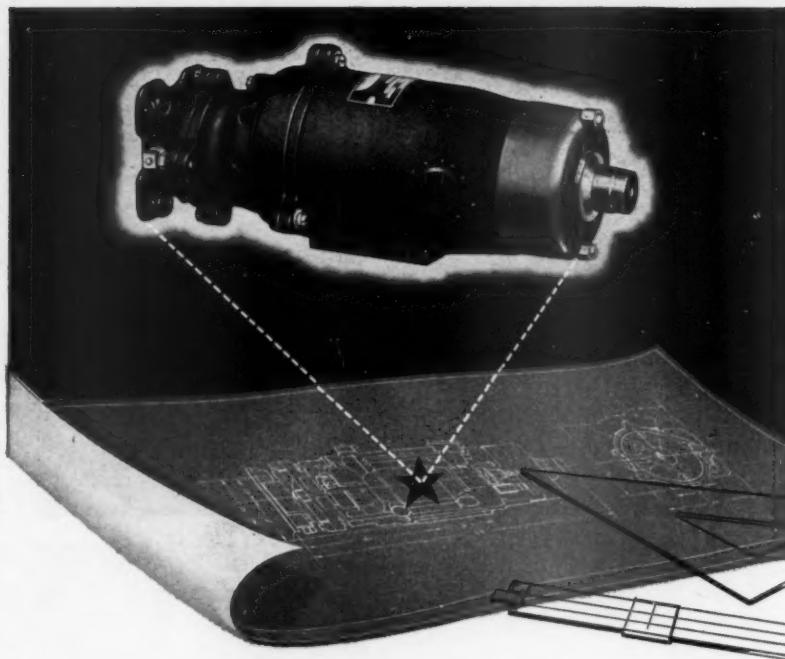
NAME.

TITLE.

COMPANY.

ADDRESS.

CITY. ZONE. STATE.



**out of proper design
comes the right motor
for your product**

With a Lamb Electric properly designed motor you obtain the motor qualities which are important to the success of your product.

Exceptional performance and dependability are standard with Lamb Electric Motors, at no increase in cost, because they are "custom tailored" by personnel having many years of experience in this field.

We would like to discuss these advantages with you for your new and redesigned products.

THE LAMB ELECTRIC COMPANY • KENT, OHIO

In Canada: Lamb Electric —
Division of Sangamo Company Ltd. — Leaside, Ontario

Lamb Electric
SPECIAL APPLICATION
FRACTIONAL HORSEPOWER **MOTORS**



to Portland so he can personally move it back.

Two for Calgary

Dear Sir:

I have just read your item in the Sept. 4 copy of BUSINESS WEEK, dealing with Toledo's attempt to build the Midwest's first planned industrial park (page 102). I might say that I had the chance to look at this park last spring and also a chance to remind Toledo businessmen that the City of Calgary has two fully planned industrial parks. The first one was opened on July 15, 1953. . . .

E. H. PARSONS

CO-ORDINATOR OF INDUSTRIAL
DEVELOPMENT
CITY OF CALGARY

Simple Solution

Dear Sir:

I read with much interest your article on differing costs in several countries for 100 locomotives (BW — Sep. 11 '54, p152). It looks to me as though we are pricing ourselves out of the world markets. I have a solution. Why not cut the domestic costs of everything in two, such as: labor, bread, automobiles, etc., and in that way get on a competitive basis with the rest of the world. If John L. Lewis or Herbert Hoover objects, why just cut them in two also.

WILLIAM J. DUFFY
HAMPTON, VIRGINIA

Happy Birthday

Dear Sir:

Many congratulations to you on your 25th Anniversary.

The birth of BUSINESS WEEK just before the bottom fell out of everything must have meant that management truly needed the weekly discussion on their problems which you so ably give them.

ROBERT E. KENYON, JR.
PUBLISHER
PRINTERS' INK
NEW YORK, N. Y.

Dear Sir:

On behalf of this firm I would like to extend to you and to your associates and editors our heartiest congratulations. . . .

BUSINESS WEEK has become an institution for most business executives and its reading has become a "must" for a great many key people in industry. I think your company and BUSINESS WEEK's editorial and advertising staff have done a wonderful job establishing and holding

the lead position which this publication occupies. . . .

CHARLES B. HARDING
SMITH, BARNEY & CO.
NEW YORK, N. Y.

Who Wants What?

Dear Sir:

After reading L. L. Jacobs' ideas on negative vs. positive wants and your lengthy discussion following his letter (BW—Sep. 11 '54, p12), I have the feeling that confusion is taking over.

The one point of agreement is that wants over and above needs are the motivating force if the individual has the money; or its equivalent, which may be a doting parent, grandparent or fond admirer. In fact *your* want may have nothing to do with it, if someone else wants *you* to have it.

Whether the want can be classified as positive or negative, selfish or unselfish, simple or complex is beside the point. People who want a certain amount of money in the bank may want it for the pleasure of counting it but generally it is the feeling of security they are after. Whether the negative side or the positive side is dominant is unimportant. The important point is that the person wants one thing more than he wants something else.

If we also eliminate the area suggested by the statement that everything we want to do is either illegal, immoral or fattening, we can stick to the more commercial classification of wants for benefit offered by certain material or service. I contend there is no such thing as sales resistance. Of course you may be an exception to the rule—and there are many—but generally speaking, most people want everything they see. If they have the money, or credit, they generally buy it. . . .

It all boils down to the simple fact that if people have money and want something bad enough they will buy it. And of course, they must believe they want the thing they buy more than they (negative) don't want something else.

And I still think the best way for the salesman to find out what their prospects or customers want *most* is to ask them. Confidentially, I'm still looking for an easier way of doing this too.

L. L. MOORMAN
RUTHERFORDTON, N. C.

To Prevent Cruelty to . . .

Dear Sir:

As a packaging man, I was interested in the apparent six-month



Joseph F. Hobbins, Advertising Manager, Anaconda Copper Mining Co., and a new SCIENTIFIC AMERICAN advertiser this year, asked us a question. We asked three long time SCIENTIFIC AMERICAN advertisers to answer it . . .



S. Holt McAloney, Director of Public Relations, Ford Instrument Co. — "SCIENTIFIC AMERICAN reaches Technical Management in all industries. Each of the business papers we use reaches but a slice of the field. SCIENTIFIC AMERICAN is the one magazine that represents the spread of our interests."

"Can you give

me one

really big

reason why

Scientific American

has moved

ahead so fast?"



Burton Schellenbach, Vice-President, Fuller & Smith & Ross — "SCIENTIFIC AMERICAN's editorial content is respected by the Technical Management of our own clients. I'm not surprised that surveys show the top scientific brains throughout industry read SCIENTIFIC AMERICAN at home, and average 4 hours with each copy."



Robert P. Goodale, Advertising Manager, Rohm & Haas Co. — "Selling chemicals means selling top technical management in a great variety of industries. In SCIENTIFIC AMERICAN, I feel we have a publication which made its bow just as Technical Management was coming into its own as a major force in so many companies."

(Advertisement)

Best since 1915

**CUT
CONSTRUCTION
COSTS**

WITH **STEFCO** PANEL TYPE
STEEL BUILDINGS



**Here's why Stefco panel buildings are better
—preferred by industry for 40 years**

• **UP FASTER WITH LESS FIELD LABOR**

Exclusive panel design, factory assembled **INCLUDING** windows, doors, flashing, etc. — eliminates all field fitting and assembly.

• **ECONOMICAL**

low first cost, low erection, low maintenance.

• **COMPLETELY FLEXIBLE**

to meet the job requirements. Any width, any length, any height. Can easily be altered as job conditions change.

• **INSULATION**

can be supplied *already installed* as part of the sidewall panels. Roof insulation may form a flat ceiling.

**Several Good Territories are open for
Qualified Dealers—Write for Details**

Whatever your space
requirement—Stefco
engineers can give
you the best answer.
Write or wire today.



**Stefco Manufacturing Co., BW-1054
P. O. Box 25, Cincinnati 36, Ohio**

Please send me information about STEFCO Panel Type BUILDINGS.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

time lag between product design and packaging shown in GE's Standard Product Development Timetable (BW—Sep. 4'54, p148).

In recent years, much has been done and written about the economies management effects through paying increased attention to ... packaging and materials handling.

However, the implication of the timetable is that management is still overlooking a big source of cost reduction; i.e. the further simplification of its packaging and materials handling by letting specialists in these fields team up with product design engineers rather than giving them a finished product to "struggle with" six months after it has been approved. . . .

WILLIAM B. SWIFT
GENERAL BOX CO.
DETROIT, MICH.



Mistaken Identity

Dear Sir:

I had the pleasure recently of meeting Mr. William White, the new president of the D & H. Can this be Mr. White I see before me? (BW—Oct. 2'54, p34).

L. B. SAMPSON
ALBANY, N. Y.

• Mr. White does have a new job, not a new face. Some of the first copies off the press ran a picture of Mr. Laurence B. Robbins, the new assistant Secretary of the Treasury, instead of the correct picture (above). Our apologies to Messrs. White and Robbins.

Letters should be addressed to Readers Report Editor, BUSINESS WEEK, 330 West 42nd Street, New York 36, N. Y.

design
GE's
development
148).
has been
econo-
through
o . . .
ndling.
of the
ment is
orce of
er sim-
g and
g spe-
p with
rather
product
s after
SWIFT

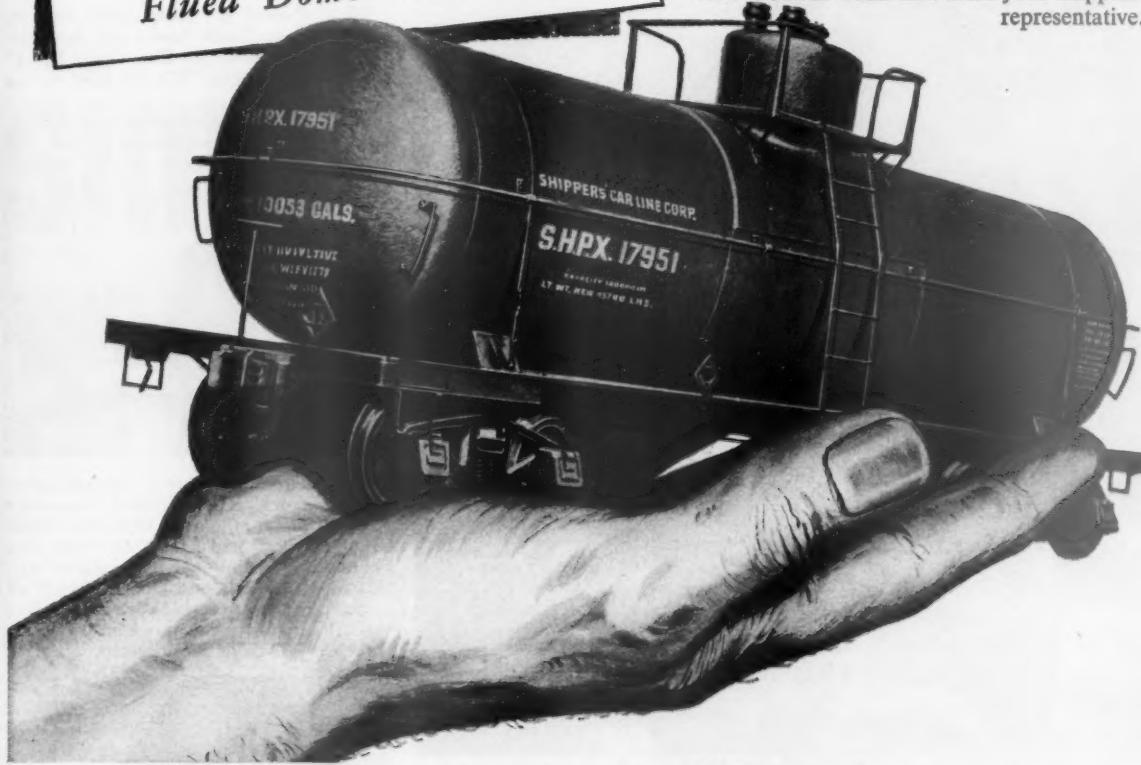
The Biggest News in tank cars since the all-welded car!

ACF built

DURADOME

Flued Dome Tank Car

A million-dollar press was needed to make this new car possible! And yet—whether you follow the trend to leasing, or whether you buy—you get DURADOME benefits at *no extra cost*. Stronger . . . easier to clean . . . easier to apply lining. Get *all* the facts on the new DURADOME now from your Shippers' representative.



improved 4 ways

1. **Flued Dome** . . . dome base actually pressed out of heavy steel plate—eliminating fillet welds and dome shelf for greater structural strength and corrosion resistance.

2. **Pressure-type Construction** . . . uses complete "ring-sections" or cylinders to build up the tank. That means heavier steel *all* the way around for greater durability.

3. **All-welded Insulation Jacket** (when required) . . . angles and bolts completely eliminated. Streamlined—more weatherproof—needs less maintenance.

4. **Standardized Underframe** . . . the same, all-welded underframe for tanks of all standard types and capacities. Provides flexibility of use; more economical maintenance!

The DURADOME car is available for lease or sale through . . .



SHIPPERS' CAR LINE CORPORATION

30 Church Street, New York 7, N. Y.

A subsidiary of **ACF INDUSTRIES Incorporated**

CHICAGO, ILL. • HOUSTON, TEX. • SAN FRANCISCO, CAL. • MILTON, PA. • EAST ST. LOUIS, ILL. • SMACKOVER, ARK. • TULSA, OKLA. • NORTH KANSAS CITY, MO.

Wausau Story

by DON W. DOUGLAS, JR.,
Director and Vice President of the Douglas Aircraft Company



"Four young fishermen, happy as skylarks . . ." Mr. Douglas talks over fishing, scouting and jet airplanes with Kenneth King (left), Alfred King, Jerome Roble and Clarence King (right).

Employers Mutuals of Wausau are "good people to do business with."

Mr. Douglas speaks of a way of life in Wausau—a good way of living and doing business. This Wausau "personality" extends far beyond Wausau. You will find it in each of this company's 89 offices across the country. It means a fairness that bends over backwards to give our customers the protection and service they expect.

We handle all lines of fire and casualty insurance, and **workmen's compensation**

is our specialty. More than in any other kind of insurance, the cost of workmen's compensation is *controllable*. And the better the insurance company, the more controllable. For example, Employers Mutuals' accident prevention program can mean lower insurance costs for policyholders. An Employers Mutuals man will show you how. Phone our local office or write to Wausau, Wisconsin.



Employers Mutuals of Wausau

What is there about Wausau, Wisconsin, that makes it the ideal home for one of the world's most important insurance companies?

Employers Mutuals invited a leading airplane manufacturer to visit its hometown and find out.

WHEN I saw them they were hurrying down the road on their bicycles. Four young fishermen, happy as skylarks. "ANY LUCK?"

They showed me their catch (picture left). Sixteen black bass, real beauties. "We caught 'em in the Eau Claire River," said Clarence King. "We just used worms . . . scout's honor."

Looking in those vigorous young faces, I could tell a lot about Wausau. It's a good country for kids to grow up in.



Here's just one example of Wausau's progressive spirit. The beautiful Alexander Airport, just a mile or so from the stream where the boys had fished. As I told Ken Schuck, the airline manager (above left), this is as modern and well-equipped an airport as I've ever seen. Wausau is like this...a city of far-advanced industry, yet with the Woods at its doorstep.



I visited the Wausau Boy Scout Day Camp with "Mac" McCormick of the *Record Herald* (above right). The magnificent new field stone lodge was built for the scouts by the citizens of Wausau, who, if they couldn't give money, gave their own time and services to make this building possible.

I saw this spirit at work everywhere. It's the spirit, too, of Employers Mutuals. And it accounts for what so many say—that they're good people to do business with.

get on top of
lubrication costs...

simplify and save
the Pure Oil way!



Whether yours is a large, multiplant corporation or a small, one-room job shop, chances are, *you can make real savings on lubrication* with Pure Oil's multipurpose lubricants.

These money-saving lubricants, you see, are specially formulated to do many different jobs equally well.

That means you *save* not only on the number of lubricants . . . but all the way down the line

from purchasing to application. Means lubrication becomes *surer, simpler, faster!*

Put this labor-saving, money-saving program to work in your plant! Write for our free booklet giving you full details.

6-WAY SAVINGS! • Simplifies Lubrication
• Speeds Up Application • Minimizes Misapplication • Cuts Down Inventories • Eases Stock Control • Streamlines Purchasing

IT STARTS HERE! 

FREE BOOKLET

The Pure Oil Company, Industrial Sales Dept. B-410
35 E. Wacker Drive, Chicago 1, Illinois

Please send me your free booklet on how to "Simplify and Save."

NAME _____

POSITION _____

COMPANY _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____



 **PURE OIL**
INDUSTRIAL
LUBRICANTS

Be sure with Pure — Sales offices located in more than 500 cities
in Pure's marketing area.

HOW HERCULES HELPS...

...BUILD "UNDERGROUND" PENTAGON



MUSCLE FOR MOUNTAIN MOVERS

More than 1,000,000 lbs. of Hercules® dynamite were used by S. A. Healy Co., Chicago, to hollow out a mountain near Washington, D. C., in the construction of an alternate global communications center for use in case present Army, Navy, and Air Force facilities are knocked out by enemy attack. The task of carving this top-secret headquarters out of solid rock would have been impossible without industrial explosives and excavating know-how.

...PROTECT LIVE WIRES



SHORT CIRCUITS STYMIED

Complicated electrical installations give longer, more dependable service when vinyl wire insulation is made with Hercules Hercoflex® 150. Hercoflex 150 is one of the Hercules family of vinyl plasticizers that are used in products ranging from toys to garden hose.



...STYLIZE KITCHEN CUTLERY

EASY TO HANDLE

These kitchen utensils not only make a woman's job easier, but their brightly colored handles add a decorative touch as well. The handles are molded with Hercules Hercoacel® cellulose acetate. In sales, design, and production, Hercules' services to the plastics industry keep products on the move.



HERCULES POWDER COMPANY INCORPORATED 968 Market Street, Wilmington 99, Del.
Sales Offices in Principal Cities

654-1

HERCULES

BUSINESS OUTLOOK

BUSINESS WEEK
OCT. 9, 1954



"Bottoming out" after a business decline isn't an altogether comfortable process. There still are rough spots.

Economic yardsticks, mainly tardy figures, still show these bumps.

But, with even a mild rose tint in your glasses, things are looking better. Mild optimism doubtless is justified.

This is no time to gamble, but too much caution could be costly.

Moving goods off shelves and out of stockrooms was the only logical course a few months ago. Now it could mean lost business.

A few businessmen, at least, are in a buying mood—filling in the gaps. Order books are beginning to show it.

Full-line stocking should be considered; you can't woo the choosey customer with dusty merchandise or empty shelves.

Here are some arguments for full-line stocking:

- Builders surprised everybody this summer. New homes and stores now going up will need fittings, fixtures, furnishings this fall.
- Consumers have kept retail counters busy just by spending near-record income. They have added to their spending, too, by going a little more into debt each month since early spring.

Many factories feel the benefits. They, in their turn, are beginning to chew up more raw materials. Stocks that looked puffy a few months ago have thinned down, may even look a little lean.

— • —

Construction has been toppling records for some months now.

September was no exception. Value of work put in place was \$3.6-billion, the highest ever for the month.

That gave the nine months a \$1.2-billion bulge over last year.

You'll have trouble finding a handier reason than construction for business holding up as well as it has.

First, there's the matter of the rate of gain. Early in the year, the industry was running about 2½% ahead of 1953. More recently, this margin has been expanded to 6½%.

Then there's the money involved. Construction outlays averaging \$3-billion a month drew on the output of millions of workers. And they provided the wages of 2½-million on-the-site employees.

Stores handling furniture and major appliances have been helped out of an inventory jam by this new home splurge. What's more, they probably still have the lushest part of this market ahead of them.

— • —

Quickening activity in the metal trades can reflect either of two factors (and, usually, a combination of the two):

Inventories finally have been pretty well worked down.

New orders are picking up gradually as factory assembly lines, particularly in autos and appliances, gain momentum. Partly this is just the normal autumn upswing, but it may exceed seasonal proportions.

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
OCT. 9, 1954

Steel operations, dragging between 60% and 65% of capacity through the summer, will exceed 70% comfortably this month.

This has spurred the rise in scrap prices. No longer is export demand the dominant factor in this market's recovery.

Chicago's steel producers seem more optimistic than the rest.

Cold-rolled sheet, they say, is going to be extremely tight in their district before you know it. One mill says it won't book new business calling for delivery before December.

Auto makers, as the model changeover progresses, yell, "Quick" and "Now" as they order. And they take half of all cold-rolled sheets.

—•—
Unusual demand for copper is due more to the temporary pinch than to any sharp and sudden upturn in fabricators' needs.

Strikes that closed mines here and in Chile are at the bottom of it.

Meanwhile, trading in copper futures in New York has put prices 3¢ a lb. and more above the going 30¢ selling price of the big producers. And the shorts in London definitely were squeezed (BW—Sep. 18 '54, p17).

Copper faces price problems. Obviously, some users would pay more than the going price for at least limited tonnages. Yet the industry is out to convince everyone that supplies are ample for the long term; a price boost now wouldn't help that drive.

Aluminum, its foot in the door, would benefit from dearer copper.

Commerce Dept. figures on manufacturers' orders and inventories still show the "bottoming out" for factories in the aggregate.

New orders matched a year ago in August for the first time this year—but because of last year's swift decline rather than any new vigor.

And inventories were cut another \$300-million from July to August.

Consumers have shaken off the worries that caused them to pay back debts heavily early in the year. But they hardly have grown rash.

Consumer credit has risen about \$800-million since last spring. In the same 1953 period, it went up by more than twice that amount.

—•—
Auto output will shortly start to climb, but don't look for all producers' profits to go up as much as volume might indicate.

• Studebaker has cut prices, others may follow.

• "Bugs" will be costly in models forced out prematurely.

• More car for the money will be a keynote—whether it means price cuts or making yesterday's extras tomorrow's standard equipment.

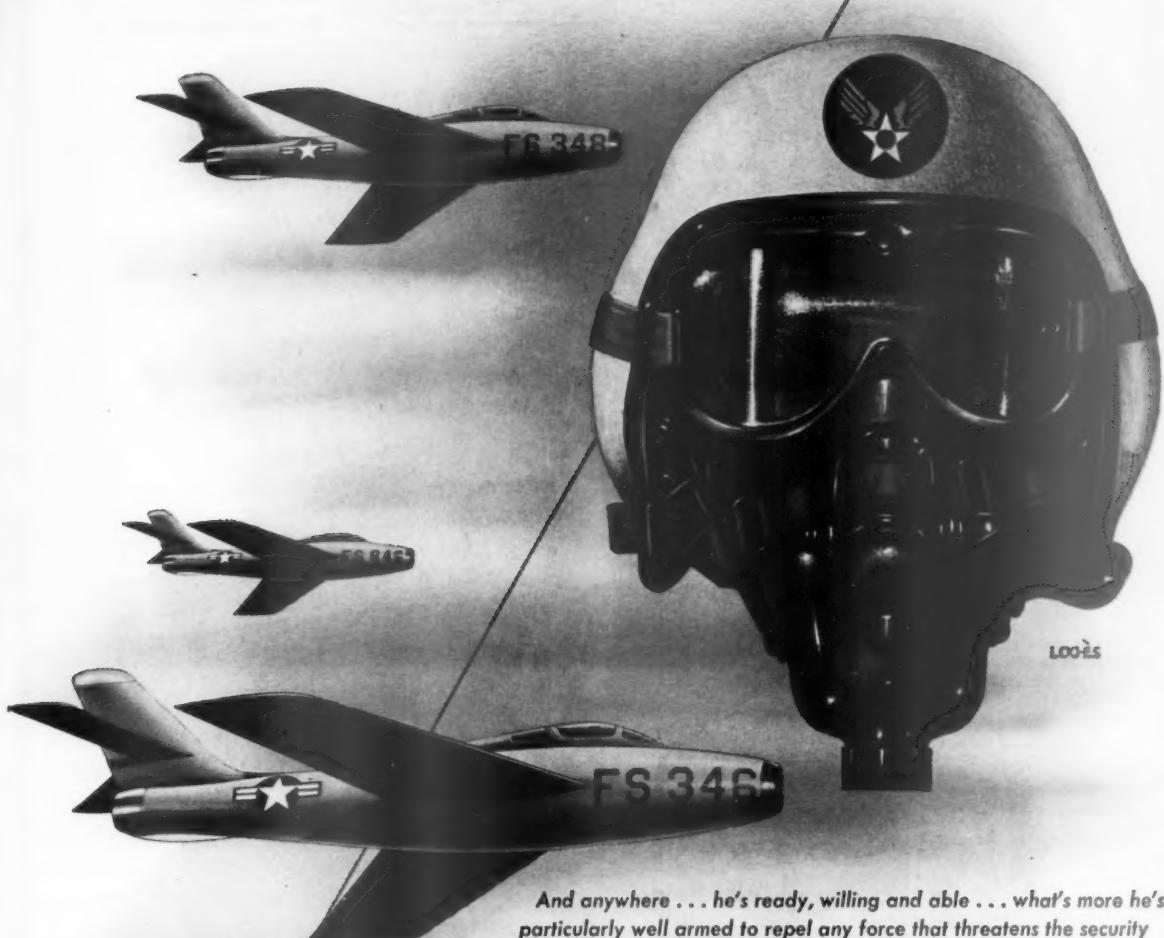
• And promotion budgets will be high in this competitive market.

Some sure gainers from the popularity contest in autos:

High-test gasoline as compression ratios rise in the horsepower race, wrap-around windshields, and the tubeless tire.

Contents copyrighted under the general copyright on the Oct. 9, 1954, issue—Business Week, 330 W. 42nd St., New York, N. Y.

ANYTIME....



And anywhere . . . he's ready, willing and able . . . what's more he's particularly well armed to repel any force that threatens the security of free nations. > > Trained to the highest possible degree and supplied with equipment to complement this skill, the U.S. Air Force pilot is qualified to carry on the enviable tradition of America's airmen. To the vital end of building aircraft in line with such need, for more than a generation REPUBLIC has dedicated its full resources. > > The F-84-F THUNDERSTREAK is youngest in the dynasty of Thunder-craft . . . But it's already a veteran of many thousands of operational hours. Flexible as a rapier in the hands of Cellini and tough as a Toledo blade, the THUNDERSTREAK's performance is equally dependable at hill-top level or 45,000 feet. This puts in the control of our airmen and our allies in the N.A.T.O. a quicksilver sentinel of civilization.



CEILING UNLIMITED for the young ambitious man . . . new vistas of education, travel and security . . . all these are available to career airmen in the U.S.A.F. Every day you're in brings you greater satisfaction in the knowledge that yours is a vital and rewarding service to your country . . . to yourself.

REPUBLIC AVIATION 

FARMINGDALE, LONG ISLAND, N. Y.

Designers and Builders of the Incomparable THUNDER-CRAFT

The ever-increasing uses for VITAMIN B₁₂



Crystalline vitamin B₁₂—which was first isolated in the Merck Research Laboratories and now is mass-produced by Merck—is in many ways the most remarkable of all vitamin discoveries. Physicians prescribe it in controlling pernicious anemia, and in the treatment of other diseases. Manufacturers of animal feeds use supplemental amounts of the vitamin in millions of tons of their products.

That vitamin B₁₂ is essential in human nutrition has been repeatedly confirmed. Also, recent studies suggest that it may have the ability to

*Merck invites Industry
to share the results of
its Research Program*

Merck research is conducted on such a broad scale that it touches almost every industry. Frequently, valuable applications of this research do not come to light until brought to our attention by specific inquiries. Problems of your own industry, in which chemistry plays a part, may be solved by the skills and research experience of the Merck organization. Address: *Scientific Administrator, Merck & Co., Inc.*

stimulate growth in children suffering from simple growth failure. These findings indicate that, in time, vitamin B₁₂ may be widely used for supplementing staple foods—just as other basic B vitamins now are added to enrich white flour and bread.

Pioneer research and commercial development of vitamins have enabled food and feed manufacturers to bring valuable new products to their customers. Other Merck chemical contributions may give manufacturers in different fields the key to important product improvements or lower-cost procedures.

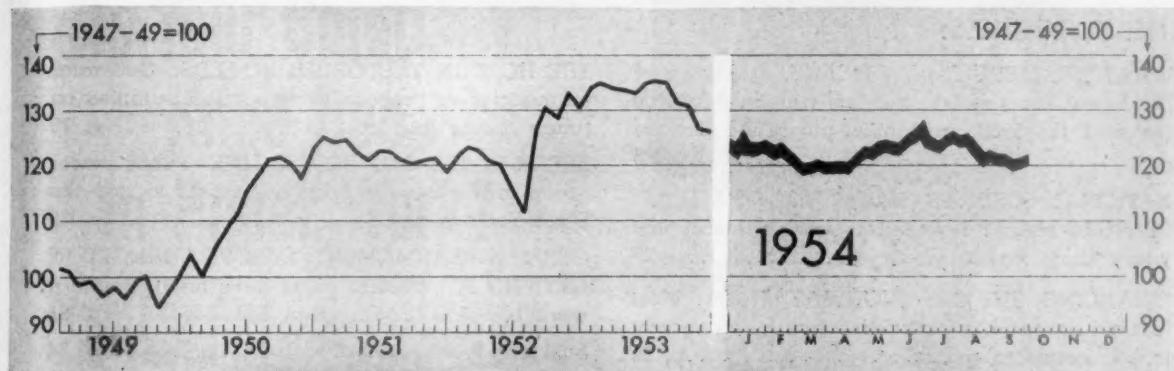


*Research and Production
for the Nation's Progress*



MERCK & CO., INC.
Manufacturing Chemists
RAHWAY, NEW JERSEY

FIGURES OF THE WEEK



Business Week Index (above)

Latest Week	Preceding Week	Month Ago	Year Ago	1946 Average
*121.9	121.3	122.1	131.7	91.6

PRODUCTION

Steel ingot production (thousands of tons)	1,678	1,678	1,502	2,146	1,281
Production of automobiles and trucks	82,817	72,804	110,995	142,824	62,880
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)	\$46,699	\$47,907	\$46,978	\$46,725	\$17,083
Electric power output (millions of kilowatt-hours)	9,158	9,072	9,087	8,414	4,238
Crude oil and condensate production (daily av., thousands of bbls.)	6,145	6,184	6,111	6,443	4,751
Bituminous coal production (daily average, thousands of tons)	1,345	1,322	1,235	1,605	1,745
Paperboard production (tons)	260,584	246,383	244,002	259,699	167,269

TRADE

Carloadings: manufactures, misc., and l.c.l. (daily av., thousands of cars)	70	69	67	78	82
Carloadings: raw materials (daily av., thousands of cars)	49	49	46	58	53
Department store sales (change from same week of preceding year)	+3%	none	+1%	+2%	+30%
Business failures (Dun and Bradstreet, number)	192	212	193	189	22

PRICES

Spot commodities, daily index (Moody's Dec. 31, 1931 = 100)	405.1	405.9	412.3	396.8	311.9
Industrial raw materials, daily index (U. S. BLS, 1947-49 = 100)	88.6	87.7	86.4	80.8	††73.2
Foodstuffs, daily index (U. S. BLS, 1947-49 = 100)	93.1	94.2	97.6	94.5	††75.4
Print cloth (spot and nearby, yd.)	19.1¢	19.0¢	18.9¢	20.5¢	17.5¢
Finished steel, index (U. S. BLS, 1947-49 = 100)	144.6	144.6	144.5	141.7	††76.4
Scrap steel composite (Iron Age, ton)	\$32.00	\$30.17	\$29.00	\$31.33	\$20.27
Copper (electrolytic, Connecticut Valley, E&MJ, lb.)	30,000¢	30,000¢	30,000¢	29,905¢	14,045¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.)	\$2.38	\$2.38	\$2.40	\$2.27	\$1.97
Cotton, daily price (middling, ten designated markets, lb.)	35.41¢	34.80¢	34.23¢	32.58¢	30.56¢
Wool tops (Boston, lb.)	\$2.23	\$2.23	\$2.25	\$2.12	\$1.51

FINANCE

90 stocks, price index (Standard & Poor's)	258.0	257.8	242.5	186.7	135.7
Medium grade corporate bond yield (Baa issues, Moody's)	3.48%	3.47%	3.47%	3.86%	3.05%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate)	14-1½%	14-1½%	14-1½%	2½-2½%	2-1%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks	55,092	54,547	54,066	52,814	††45,820
Total loans and investments, reporting member banks	83,295	82,980	82,778	78,901	††72,036
Commercial and agricultural loans, reporting member banks	21,025	21,005	20,798	23,103	††9,299
U. S. gov't guaranteed obligations held, reporting member banks	35,733	35,908	35,862	31,663	††49,879
Total federal reserve credit outstanding	24,857	24,651	24,890	26,252	23,883

MONTHLY FIGURES OF THE WEEK

	Latest Month	Preceding Month	Year Ago	1946 Average
Public expenditures for new construction (in millions)	Sept.	\$1,179	\$1,173	\$1,162
Private expenditures for new construction (in millions)	Sept.	\$2,440	\$2,446	\$2,200
Consumer credit outstanding (in millions)	August	\$27,932	\$27,835	\$27,810
Installment credit outstanding (in millions)	August	\$21,310	\$21,246	\$21,218
Personal income (seasonally adjusted, in billions)	August	\$285.4	\$285.7	\$286.4
Farm income (seasonally adjusted, in billions)	August	\$15.3	\$15.1	\$13.8
Manufacturers' inventories (seasonally adjusted, in millions)	August	\$43,878	\$44,194	\$46,888
Wholesalers' inventories (seasonally adjusted, in millions)	August	\$11,758	\$11,752	\$11,923
Retailers' inventories (seasonally adjusted, in millions)	August	\$22,451	\$22,403	\$22,775

*Preliminary, week ended Oct. 2, 1954.

†† Estimate.

‡ Date for "Latest Week" on each series on request.

in BUSINESS this WEEK . . .

GENERAL BUSINESS:

WHAT THE MERGER LAW MEANS. Turndown of Bethlehem-Youngstown proposal suddenly reveals the teeth the 1950 amendment put in the Clayton Act. p. 25

NATIONAL BUSINESS SHOW HITS THE HALF-CENTURY MARK. Despite the odds against it, this year's show was the best yet. p. 27

FINANCING THE BIG HIGHWAY PLAN. Most favored proposal is for a federal highway agency to sell bonds to public. p. 28

THE HOLE IN THE ORDER BOARDS. Generator manufacturers prepare to woo public utilities as future orders lag. p. 29

BREAK IN THE GOP POWER LINE. Public power group gets a new weapon in its fight to stop the Dixon-Yates plan. p. 30

GERMAN REARMAMENT: EUROPE CHANGED IN GETTING IT. Western allies have finally found a workable plan for European defense. p. 31

Business Briefs p. 34

BUSINESS ABROAD:

HOLLYWOOD: THE FOCUS IS OVERSEAS. This year's jump in export profits means a new victory in their foreign market fight. p. 158

NEW CREDIT PLAN PUSHES U.S. EXPORTS. Export-Import Bank prepares to help Americans meet foreign competition. p. 160

KAISER STRIKES AN AUTO DEAL. Argentine plant will use idle machinery from Willow Run. p. 162

GERMAN REARMAMENT: EUROPE CHANGED IN GETTING IT. Western allies have finally found a workable plan for European defense. p. 31

COMMODITIES:

A YEAR ON A ROLLER COASTER. For the coffee trade, the up-and-down ride isn't over. p. 186

COMPANIES:

THE LONG-LIVED SPARKPLUG. Champion Spark Plug Co. introduces a wide-base plug that has the auto industry excited. p. 86

FINANCE:

RIDING THE BUILDING BOOM. Cement shares have been doing generally better than industrials for some time. p. 68

CLOUDING CANADA'S BLUE-SKIES. Securities agencies are cracking down on dealers in fraudulent stocks. p. 74

DO-IT-ON-CUFF. Installment sales for do-it-yourself tools are planned by hardware men. p. 80

INSTITUTIONS:

URBAN LEAGUE LINE: BIAS IS BAD BUSINESS. The little-known league

	Page
Business Outlook	17
Washington Outlook	37
International Outlook	155
Personal Business	175
 The Trend	 192
Figures of the Week	21
Charts of the Week	178
Local Business	148
Readers Report	8

is the outfit a businessman is likely to deal with on race problems. p. 180

LABOR:

TAKING TROUBLE IN HIS STRIDE. James P. Mitchell is finishing his first year as Secretary of Labor. p. 166
AT THE IUE: QUESTIONS AND ANSWERS. In Miami last week, Labor Secy. Mitchell departed from tradition. p. 168

UE ADMITS "DARK DAYS." Worried by membership slump, officials try to boost convention spirits. p. 171

MANAGEMENT:

THE MONEY MUST GO SOMEWHERE. In next few years, many companies will find themselves surprisingly well fixed for cash. p. 43

IT CAN PUT STORY OVER FAST—AT A PRICE. The idea of closed-circuit TV has come a long way. p. 46

MARKETING:

MAYTAG'S FIGHT TO RETAKE LEAD. Fred Maytag II (cover) is counting on his new automatic washer to turn the trick. p. 108
POOLING THEIR OPINION POLLS.

Two opinion research groups merge to get tighter control over what goes on in field. p. 119

COCA-COLA: TRIES OUT NEW BOTTLES. It will soon test-market the large and medium sizes. p. 124

THE MARKETS:

THE HEAVIES ARE BUOYANT. Wall Street cites several reasons for superior showing of capital goods shares. p. 164

POLITICS:

ALL OVER THE COUNTRY two issues are emerging as the key to the Congressional campaign. Putting two districts under a microscope you find . . .

I. **KANSAS CITY:** The issue is farm policy. p. 54

II. **SOUTH BEND:** The issue is recession. p. 62

PRODUCTION:

MAKING CASTINGS BY PUSHBUTTON. Automatic foundry of Eberhard Mfg. Co. shows the industry's dream can work. p. 130

A ROAD OF NATURAL RUBBER. The "new" idea in highway construction is perhaps cheaper, more durable. p. 136

NEW PRODUCTS. p. 140

REAL ESTATE:

A BUNDLE OF BUSINESS FOR A ONE-MAN OFFICE. Bermac Building, Houston, offers tenants services in a package deal. p. 92

SOLVING HOUSTON'S PARKING JAM. Open parking lots give way to modern, semi-automatic garages to ease congestion. p. 103

Is Your Company Knee Deep in Paper Work?

**Now You Can Cut Paper Work
in These Key Operations!**

- Invoicing Purchase Orders
- Financial Reporting Production Orders
- Receiving Reports Back Orders
- Accounting Shipping Orders



A "One Writing" Business System Based on the New Copyflex Model 100 Solves Your Problems!

Here it is! The compact, low priced, desk top copying machine that's ideal for "one writing" business system paperwork—that brings the advantages of mechanical copying within reach of practically any plant and office!

The Bruning Copyflex Model 100 turns out exact copies of invoices, purchase orders, statements—of anything typed, written, or printed on ordinary translucent paper—in

seconds. It makes up to 300 letter size copies per hour at a cost of less than 2¢ each. Produces copies up to 11 inches in width by any length. It is clean, quiet, and simple to operate. No stencils or masters are required. No messy inks or fumes are involved.

Let us show you how this versatile copying machine can help you cut costs and increase your operating efficiency. Mail coupon today!



Bruning Copyflex Model 100-\$495⁰⁰

BRUNING
Copyflex

Copies anything typed,
written, printed, or drawn
on ordinary translucent
paper—in seconds.

SPECIALISTS IN COPYING SINCE 1897

Charles Bruning Company, Inc.
4700 Montrose Ave., Chicago 41, Ill., Dept. 416
Please send me more information about the
Bruning Copyflex Model 100.

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____



Mr. Vincent Sillitta, Traffic Manager of Clarostat Mfg. Co., Inc., discloses

"How this guided missile gets there on time!"

... 5, 4, 3, 2, 1, fire . . . and a Clarostat product helps head the missile for an 'enemy' bomber!

"But before its deadly rendezvous, that tiny part of the missile's 'brain,' a Clarostat resistor, had to keep another vital appointment—with the Guided Missile production schedule.

"That date was kept by Air Express!

"We ship up to 15,000 pounds of Clarostat Resistors per month by Air Express. Their sizes range from the one men-

tioned above—finer than a human hair—to shipments weighing one hundred pounds and more.

"With Air Express help, we can meet extremely exacting delivery specifications. Yet most shipments cost *less* than by any other air service. A 25 lb. shipment from Boston to Toledo, for instance, costs \$6.45. That's *5¢ less* than the next lowest air carrier—and the service can't be compared!"

It pays to express yourself clearly. Say Air Express!



Air Express



GETS THERE FIRST via U.S. Scheduled Airlines

CALL AIR EXPRESS . . . division of RAILWAY EXPRESS AGENCY

Antitrust...

1904



1920



1938-43



1950



Now



Round 1

THEODORE ROOSEVELT won the first big merger case—against Northern Securities Co., which had acquired majority capital stock of two competing transcontinental railroads (Great Northern and Northern Pacific). The Supreme Court landmark decision declared the combination illegal.

Round 2

JOSEPH MCKENNA, Supreme Court Associate Justice, refused to break up U. S. Steel Corp. (formed by the merger of 174 independents with over 50% of iron and steel production) because "... the corporation did not achieve monopoly . . . and it is against monopoly that the Sherman Act is directed, not against an expectation of it, but against its realization."

Round 3

THURMOND ARNOLD spent five years filing almost 350 cases as chief trustbuster of the New Deal. But the law did not provide for stopping mergers, and courts would not uphold Arnold's efforts to break up big companies.

Round 4

EMANUEL CELLER, congressman, sponsored 1950 amendment to Clayton Act which for the first time banned all mergers whenever effect "may tend to substantially lessen competition"—whether or not the merger actually restrains trade or results in a monopoly.

Round 5

HERBERT BROWNELL concluded that the merger proposed by Bethlehem Steel Co. and Youngstown Sheet & Tube Co., "would be in violation of the antitrust laws." His decision may put the new, tough law into the courts for its first test. But Brownell hints the 1950 law can be improved by amendments he'll seek in the next Congress.

What the Merger Law Means

When Attorney General Herbert Brownell turned down the proposed merger of Bethlehem Steel Co. and Youngstown Sheet & Tube Co., he dramatized for all businessmen a fact that up to now has only been sensed vaguely: When Congress closed the merger loophole in 1950 it converted the Clayton Act into the strongest anti-trust weapon put in the antitrusters' hands since the original Sherman Act was passed in 1890.

Here's why: The 1950 amendment bans any merger if it "may tend to

substantially lessen competition." The merger need not either produce a monopoly or even tend toward monopoly. All that's necessary to make a court case is for either Federal Trade Commission or the Dept. of Justice to find a reasonable probability that competition in general may be lessened.

The law as it is written is binding upon any Administration regardless of whether it is sympathetic or unsympathetic to business. The only option the executive has is to go to Congress and ask for a change.

This is what Brownell was up against when Bethlehem and Youngstown proposed that their companies—respectively the second and the sixth largest steel producers in the country—join forces. Bethlehem and Youngstown together would have assets of \$2,297-million—compared with U.S. Steel Corp's \$3,247-million.

I. Case for Merger

Brownell had almost no precedent to go on in making his decision. Earlier

in the Administration, other big mergers were considered and approved. Multimillion-dollar corporations in the auto industry—the “independents” were given a green light largely because they had to merge to compete with the Big Three.

Brownell and his antitrust chief, Stanley N. Barnes, also had two other cases they had to consider—FTC's cases against Pillsbury Mills' purchase of two competing makers of home baking mixes, and Crown Zellerbach's purchase of a competing pulp and paper maker on the West Coast.

But none of these cases was of much help in the steel negotiations. For one thing, every merger is different. For another, if the Bethlehem-Youngstown merger had been approved, it would have been easier for companies in other industries to argue for mergers of their own.

There's no doubt from the legislative history of the 1950 law that Congress intended to crest a big obstacle to the wave of postwar mergers. Brownell's ruling proves that Congress did its job well: The situation seems to be that if there's any legal doubt about a merger at all, the antitrust lawyers feel they have to turn it down.

• **Case—**Essentially, Bethlehem and Youngstown made their case on these points:

- The geographic location of the plants—Bethlehem on the East and West Coasts and Youngstown in the Midwest—precludes any substantial competition between the two companies. Both make huge amounts for tinplate, for example; but the two mills are 900 miles apart, and each is in the middle of a big canning area. Hence, a merger would not tend to lessen competition.

- Product lines of the two companies are complementary. Bethlehem, for instance, makes no seamless pipe, while Youngstown does. Both companies want to diversify, and merger is the obvious method.

- Merger would strengthen competition in the steel industry by giving more competition to the biggest producer—U.S. Steel, the only producer that now has plants on both coasts and in the mid-continent area.

II. Case Against Merger

Both Brownell and Barnes admit that this line of argument has merit. But to them, other factors seemed to have more weight:

Nature of the industry: Steel is the nation's basic industry, and 14 companies produce about 85% of the total output. Investments are huge, and opportunities of entering steel are obviously very limited. One rule of thumb has it that the smallest efficient integrated plant would cost about \$250-million today.

On this ground, merger of the second and sixth largest companies would reduce substantially the number of competitors in steel.

Competition: Antitrust lawyers agree the merged company might be better able to compete with U.S. Steel. But they look at the other side of the coin. In their eyes, it's more significant that Bethlehem, already second largest, would increase its economic power still further and thus lessen the relative strength of the smaller companies in the industry. In effect, the small companies would have a bigger No. 2 to contend with.

Markets and products: Antitrust lawyers cite company figures they think show a lot more competition between Bethlehem and Youngstown than the companies admit. They compete in such widely separated market areas as Detroit and the Gulf Coast of Texas. And the antitrust lawyers emphasize that those product lines common to both comprise a substantial part of each company's business.

Politics: Charges of politics have not been raised in public. But Brownell can hardly have failed to be aware when he discussed the case with Pres. Eisenhower in Denver that approval of the merger would have handed a bucket of gasoline to the Democrats. They have been trying to ignite the current campaign with charges of Republican giveaways and favoritism to big business interests.

If the Democrats take control of Congress next year, Republican approval of any such merger as the Bethlehem-Youngstown one could bring on weeks of hearings. Democratic Rep. Emanuel Celler, for instance, has labored steel before, when he was chairman of the House Judiciary Committee; and he pushed the anti-merger amendment to the Clayton Act for years.

III. Court Test

Signs from both sides point toward a showdown in the courts.

Both Pres. Eugene G. Grace of Bethlehem and Pres. J. L. Mauthe of Youngstown say they are not yet convinced that the merger would violate the antitrust laws. Mauthe significantly notes that the 1950 law still has not been tested in the courts.

Key antitrust lawyers, for their part, say privately that they would welcome a test of the law in this particular case. They are convinced they would win hands down. Aside from that, they feel it is a good case, from the legal standpoint, through which to get a court interpretation on the meaning of the new law.

• **Precedent—**Actually, they already have one small court precedent to lean on, for whatever it's worth. Courts granted an injunction to private interests that opposed a move by Benrus Watch Co. to acquire stock control of Hamilton Watch Co. The court agreed that should Benrus take control, the merger would be illegal under the new law.

If a court test comes on the steel merger, it will come this way: The companies would announce they had signed a contract committing them to merge. At this point the Justice Dept., citing the impossibility of unscrambling an accomplished merger, would demand a temporary injunction barring the companies from proceeding further. The whole merger case then would be fought over granting a permanent injunction.

• **Changes?**—It would all take a long time. Meanwhile, there's a chance that next year Brownell may recommend changes in the 1950 law. In his speech at Toots Shor's restaurant in New York announcing the merger decision, Brownell promised to recommend antitrust revisions now being fashioned by his special study committee of lawyers and economists, who have been working quietly on the project for over a year.

He said the committee is suggesting recommendations to make the antitrust laws “more in keeping with a middle-of-the-road economic and social administration of those laws.”

Brownell didn't go into details. But his words, in the context of the speech, point to a rewriting of the ban on mergers. It's not likely Brownell was talking about a toughening of the law; hence he was understood as promising to press for language less sweeping than the original language that Congress had adopted.

One problem with the present law is that almost any merger might be said to “substantially lessen competition.” That's all an anti-merger crusader would need to have a legitimate reason for filing a suit. One good guess is that Brownell may recommend changes in this key phrase to give corporations more leeway.

IV. When You Can Merge

If there's any doubt at all about a merger you're considering—and most people will wonder about antitrust clearance the first thing—it's best to clear it with either FTC or the Anti-Trust Division of the Justice Dept. You can take your choice; but if you go to one and get turned down, you won't get a second chance with the other.

If you do get a refusal but go ahead anyway, you can be almost sure of having to go to court. FTC has filed cases

against the companies that ignored its rulings. Justice promises to do the same.

• **Road Map**—No one really can tell you whether your merger would be acceptable. In general, though, here's the way antitrusters have ruled in the cases they've handled so far.

You can merge if:

You are broke or steadily losing out in your industry. This was the basis for approving the auto mergers. But the ruling could be different if, as rumored, the new-merged independents start another round of mergers.

You're diversifying. As long as there is no question of reducing competition in the new field you are entering, you probably are on solid ground.

You are "small" in your own industry. The antitrusters are not going to fuss with mergers of really small companies. The anti-merger law was designed not to hold down the little fellows, but to keep the big ones from getting even bigger.

Entrance is easy into your industry. Antitrusters would not be inclined to stop a merger of even the biggest factors in the garment industry, say, because new competitors are continually entering the business and thriving.

V. When You Can't Merge

On the other hand, your merger probably has one strike against it if:

It's vertical. In an industry where it counts, it's risky to buy up either your raw materials suppliers or your customers—limiting your competitors' sources of supply or their market outlets. Note, though, that despite this general rule, Chrysler Corp. got FTC approval to buy its body supplier, Briggs Mfg. Co., even though Briggs was a supplier to other competing auto makers.

It's horizontal. You're taking a chance in buying a company that is in direct competition with you. Almost on the face of it, this could be judged as lessening competition. Here again there are exceptions: There's nothing to stop you from buying a company with the same line of products if its market is geographically separated from yours. For instance, the Justice Dept. just approved a merger of a Denver cement company with another cement company in Spokane.

You can't judge your merger by trying to fit it into one of these categories. It won't fit precisely; every merger presents different problems, peculiar to either the industry or the companies merging.

Antitrusters are taking on each one as it comes along, on a case-by-case basis. The untried and indefinite nature of the anti-merger law makes the antitrusters' application of the law in specific cases difficult to predict.



National Business Show . . .



. . . Hits the Half-Century Mark

By all odds, last week's National Business Show should have been a flop. Since Grand Central Palace in New York was not available, the show had to be split between two regimental armories about half a mile apart and connected only by limousine service. The Jewish holiday, the World Series, and a heat wave siphoned hordes of people away from the world of business. In addition, the four biggest companies in the industry, bulwarks of previous shows, did not participate. But at 10 p.m. on Friday, when the last ticket stub had been counted, the show still added up to one of the largest and most successful ever. This year's show marked the 50th anniversary of what has become the show-

case of the \$2-billion office machine and equipment industry. First called the Typewriter and Office Furniture Exhibition, it drew nearly 100,000 visitors in December, 1904. In the early days, it was a show in every sense of the word; the exhibitors competed for attention with bands, singers, vaudeville teams.

Four companies that participated in the 1904 show also appeared in the 1954 edition. They were Addressograph-Multigraph Corp., A. B. Dick Co., Elliot Addressing Machine Co., and Felt & Tarrant Mfg. Co. The only company that capitalized on the 50-year theme was Royal Typewriter Co. Its display (lower picture) was built around four office settings of the past.

Financing the Big Highway Plan

● Eisenhower's dream of a nationwide, \$50-billion roadbuilding program poses the question of money. The White House is working on that this week.

● Most favored proposal is for a federal highway agency that would sell bonds to the public.

● This agency would then make grants and loans to the states, which would do the actual construction.

Early in 1955, Pres. Eisenhower will ask Congress to help him turn a dream into concrete. The dream: 10 years and \$50-billion of nationwide highway construction (BW-Jul.17'54,p29).

This huge program is part of the Administration's campaign for U.S. economic growth. Eisenhower hopes that the roadbuilding he envisions, with its 10-year duration and ponderous proportions, will give the economy a powerful, long-term stimulus. It is designed partly to take the place of war and defense production, which have fueled the economy for the past decade and a half, and which are now petering out.

Total highway construction in the country now is edging up toward \$4-billion a year, and will probably reach that figure in 1955. Eisenhower's plan would more than double the current rate, raise the spending level to \$9-billion each year.

● Money—This week the White House is busy piecing together financing plans to pay for the giant program without increasing the federal debt or boosting gasoline taxes.

Details are still hush-hush. But bits of the big planning project keep cropping out here and there. Basic to the whole scheme is finding a method of drawing on private capital to finance the roads, using gasoline taxes and other highway revenues to pay off the debt.

A favored method would set up some sort of federal highway corporation to sell bonds to the public. This government agency would finance grants to the states to cover the federal share of the roadbuilding costs. It could also make loans to the states or guarantee the issues of state highway agencies.

An arrangement of this kind would keep borrowing clear of debt ceilings both in the federal government and in the 36 states where debt limitations apply. Highway tax revenues would be pledged as security for the bonds. The federal government would continue its present 2¢-per-gal. gasoline tax to finance its part of the program.

There's plenty of precedent for a federal institution to sell bonds to pri-

vate investors. At least four federally authorized organizations now raise money in the open market, without government guarantee of their securities: Federal Land Banks, Federal Intermediate Credit Banks, Federal Home Loan Banks, and Central Bank for Cooperatives. After Nov. 1, the reconstituted Federal National Mortgage Assn. (Fanny Mae) will have power to issue debentures.

● Share—The government's part in the road program would be big. In addition to continuing its present aid program, the federal government would assume the whole cost of rebuilding and improving the 40,000-mile interstate highway system—the nation's main trunkline network. So far, the federal matching share on this system has been 50%, as on other federal-aid roads; a stepup to 60% next year was authorized by the last Congress.

Upgrading the interstate system to modern standards would cost \$20-billion or more, according to the Western Assn. of State Highway Officials.

Aside from financing, the role of the federal government in roadbuilding would stay within present bounds, according to present thinking. The states would design, construct, maintain, and police the roads as they do now. Design and construction would continue to follow federal standards and specifications. The federal government would continue to collect the 2¢ gas tax—a point conceded by most states in return for further federal payment on roads.

A sizable number of states have long been arguing that the government should put an end to its practice of aiding the states in roadbuilding, and should also stop collecting the 2¢ tax. Many governors have protested that this tax represents revenue that ought to go to the states instead of Washington. These governors have argued against still further federal interference in highway matters, as envisioned in the President's 10-year program. But now, most of the governors seem won over (BW-Aug.21'54,p26).

● Study—Administration plans for financing the \$50-billion program are still liquid. Gen. Lucius Clay has been drafted by Eisenhower and asked to come up with specific proposals. The 100% federal financing of the interstate system is one of the few parts of the roadbuilding program that have begun to gel.

Clay's five-man committee hoped to get a tankful of financing ideas at a two-day session this week. Officers of 19 national organizations with special interests in the highway field—railroads, truckers, oil companies—together with farmers and state and local officials, were invited to tell how they think the financing should be handled.

One specific plan has been under consideration by a special highway committee representing state governors. Because the governors wanted the advice of state highway officials, A. E. Johnson of Arkansas, president of the American Assn. of State Highway Officials, has been working with the committee.

Eisenhower wants action from the governors by November. Political campaigns have upset plans for a second meeting of the governors' committee. The President will probably call the governors to Washington after Election Day to put their stamp on the plan he will send to Congress.

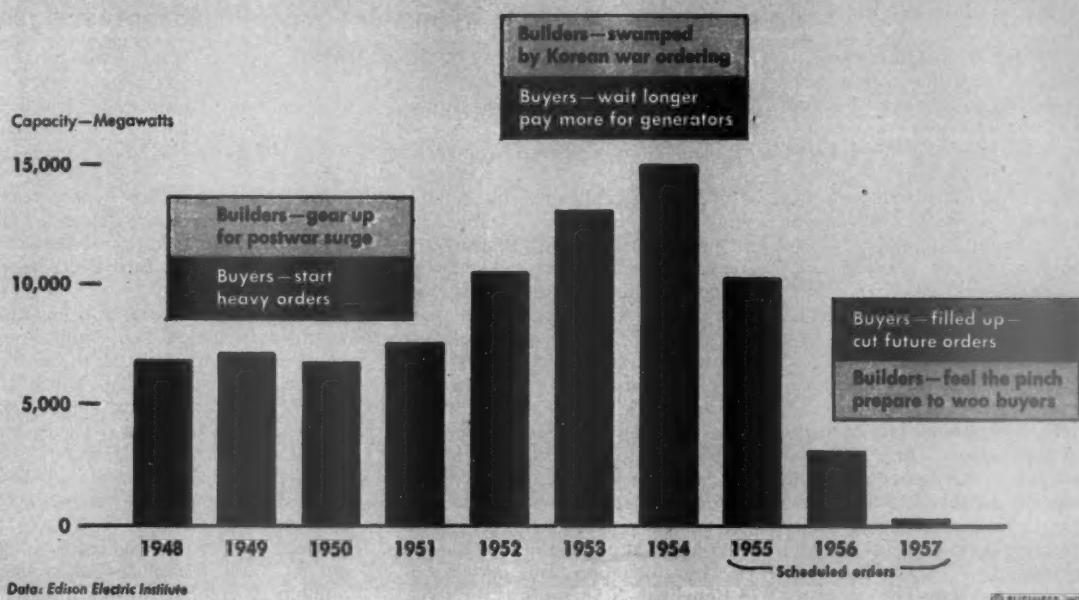
Still another group is working on the highway program. This is a Federal interagency group taking in the Treasury and Defense, the Council of Economic Advisers, and the Budget and Public Roads bureaus. Heading this committee is Public Roads Commissioner Francis V. du Pont.

Eisenhower counts on Gen. Clay to deliver a workable plan by December. As top coordinator, Clay is expected to put together a financing formula that Congress will buy. The plan will be submitted for prior approval to the governors, the interagency group, and the Cabinet's Committee on Transport Policy, headed by Commerce Secy. Sinclair Weeks.

● Toll Roads—Little has leaked out about plans for toll roads in the President's program. He was in favor of toll revenues in his notes to the Governors' Conference in July—as one means of paying for needed roads.

Commerce Dept. studies have come up with the finding that 10,000 additional miles of toll roads could pay for themselves with toll revenues. Administration thinking still balks at federal subsidy for toll roads. Future projects that meet the self-liquidation tests might get some help in the form of federal insurance on their bonds to lower the interest charge.

Generator Production: What Happens To Builders When Buyers Take Over



BUSINESS WEEK

The Hole in the Order Boards

The few weeks remaining in 1954 are ticking off a zero hour for the builders of big turbine generators. The manufacturers—notably General Electric Co. and Westinghouse Electric Corp.—can see a nightmare in the chart above, unless the downcurve in new generator orders reverses itself soon.

At this moment, the generator builders are enjoying their best production year in history (tallest bar on the chart). But their enjoyment is eclipsed by worry over their order boards. Schedules for 1956-57 show a void that's ominous in light of the time it takes to build and install a huge generator—24 to 30 months.

• **Sales Push**—Manufacturers are trying to plug the hole by wooing their major buyers, the public utilities. Westinghouse has opened a sales promotion program on the theme of "The Balance of Power," urging buyers to take care of future needs by increasing their capacity at a steady rate. Now is the time to buy, says Westinghouse, when orders can be put to work immediately and delivery dates can be assured. Manufacturers also say that economies can be passed along to the buyers when labor doesn't have to be paid for overtime.

Some utilities with bitter memories of the seller's market are rubbing their hands over the plight of the generator

builders. Others are juggling their schedules to move their orders ahead—whether it's out of altruism in maintaining an equipment industry or out of a spirit of bargain-hunting, it helps the builders now.

• **Some Gains**—Last week, Westinghouse said orders are finally on the up-swing, with nearly 1-million kw. of capacity placed on the books since Aug. 1. A GE spokesman agreed that there is hope.

"Since last month," GE said, "we have received orders for new machines, totaling more than 800,000 kw. Increasing activity in financing indicates that electric utility companies are now reaching decisions on the amount of new generator capacity they must place on the line in 1956-1957."

• **Worse Than Expected**—Most analysts in the industry had expected business to slacken as postwar orders were filled, but few expected a serious slump. Some experts ascribe the sharp drop-off to a mild buyers' strike. As the utilities built their capacity up past the comfortable margin of 15% above peak demand, they relaxed and decided to wait out the manufacturers, these observers feel.

The utilities aren't admitting publicly that this is what happened, but they do express satisfaction that they

are now getting "more competitive prices and a lot better service."

• **Boom and Bust**—As the chart shows, sales volume for big generators is anything but consistent. During the war, production for civilian uses was held down by government order; consumer demand for electricity was also held down by restrictions on home building and on appliance manufacture. Moreover, a recession was predicted when the conversion to a civilian economy came after the war, so utilities were slow to order new capacity.

At the end of the war, the utility companies were startled by a boom. Their cushion of 15% reserve over peak demand shrank dangerously to a mere 5% or 6%, and they flooded manufacturers with rush orders.

The equipment makers expanded and geared up to fill the rush orders. By Korea, the backlog was pretty well taken care of. Then came a new and bigger rush of orders, with defense contracts as well as the normal demands of industry. Again the manufacturers expanded their plant and their labor force.

Now they are tuned up to produce a record 15,000-megawatts of new capacity a year (chart). A megawatt is 1-million watts, or 1,000 kw., as capacity is usually measured. And now the switch is suddenly pulled, the utilities

no longer order 15-million kw. a year, and the giant production machine is starting to grind to a halt.

• Utilities' View—The utility companies see nothing incongruous in this situation. For the first time since the 1930s, they say, they have all the capacity they need for the moment. Before going through the tedious process of raising money for expensive new generators—usually by issuing bonds—they want to see how the future looks.

Utilities like to have 15% reserve capacity above the calculated peak demand, but they don't like to go much over that. According to a large Eastern utility company, it costs around \$125 a year for each kilowatt of idle capacity. This company says it has had years when thousands of kilowatts went idle.

Some prospective buyers also say they are hanging back to watch technological advances. They want to see, for example, how atomic power might work into their plans. This "wait and watch" attitude is strengthened by the interchange system that lets them buy, at cost, power from neighboring utility systems to carry them over any unusual hump in demand.

• Manufacturers' View—The generator makers, on the other hand, claim that the product will be more expensive and delivery dates more uncertain if this "boom and bust" buying continues. They argue that peak loads (the top demand for electricity in an area) are doubling every 10 years and that utilities can't afford to postpone buying equipment.

Escape Clause Invoked In Gas Control Tangle

The thorny problem of federal control over natural gas producers was given a new but not wholly unexpected twist this week when 14 producers furnishing gas to one of the nation's big interstate pipelines served notice that they were terminating their supply contracts under escape clauses. The pipeline—Texas Illinois Natural Gas Pipeline Co.—immediately asked FPC to step in.

• Ruling—Long before the Supreme Court ruled in the Phillips Petroleum case that FPC had authority over independent gas, producers had been writing escape clauses into their sales contracts. These clauses simply provided that the contracts could be terminated if any regulatory body, such as FPC, took jurisdiction over the suppliers' operations.

No one expects the suppliers to shut off the flow of gas, but the current action will go far toward clearing up long-standing uncertainties over the position of both suppliers and pipelines under the new FPC controls.

Break in the GOP Power Line

Mississippi man's blast at utilities gives public power group new chance to try to short-circuit the Dixon-Yates plan—and they're using it to the limit.

This week, the Eisenhower Administration was going doggedly ahead with its plans to bring private power back into the Tennessee Valley Authority area. But it faced some sudden and disconcerting difficulties. A family squabble in a relatively small Mississippi electric utility company has given the public power forces a weapon they never expected to have.

This became evident this week when a hitherto obscure official of the Mississippi company, J. D. Stietenroth, sat in a witness chair before Sen. William Langer's monopoly subcommittee, and unrolled a series of lurid charges against the utility industry.

Stietenroth's blast gave new life to the public power groups, which had been losing steam in their battle against the Administration plan.

• Limelight—Stietenroth is the recently ousted secretary-treasurer of Mississippi Power & Light Co. He became the white-headed boy of the public power advocates when he charged recently that the company is dominated by Wall Street—that Middle South Utilities, Inc., the New York holding company that controls MP&L stock, "milked" the people of Mississippi and violated at least the spirit of the securities laws.

MP&L promptly fired Stietenroth. Just as promptly, the public power bloc jumped at this new chance to assault the Administration plan to bring the so-called Dixon-Yates group into the TVA area. Middle South, headed by Edgar Dixon, is a principal in the Dixon-Yates proposal to supply the Paducah (Ky.) atomic plant by bringing private power into the TVA system to take care of the plant's needs.

The public power men in Congress then touched off a Congressional investigation of utilities practices.

• Break—Stietenroth's charges actually had nothing to do with the Dixon-Yates proposal. His complaints involved what he considered domination of the financial life of a subsidiary by a mother firm. That this mother firm is 80% of the Dixon-Yates combination was the "break" the losing public power group had dreamed of.

Eisenhower, through his Budget Bureau, had ordered the contract with Dixon-Yates to be signed. Under it, Mississippi Valley Generating Co.—the company formed by Dixon as president of Middle South, and E. A. Yates, chairman of the board of the Southern Co.—would build a 650,000-kw. steam plant

near Memphis. This would wheel energy to the Atomic Energy Commission's Paducah plant over TVA's system.

The Administration has steadily pushed its proposition forward, bringing recalcitrant Democratic holdovers on AEC and TVA into line little by little.

Until recently, the fight over Dixon-Yates has been a clear-cut public-vs.-private power controversy, with the only hints of political scandal coming from extreme partisan quarters. The Administration was winning. After getting legislative approval of its action, it was taking final steps to iron out the details so the contract could be signed before the year is out.

• Charge and Answer—That's why the public power group lost no time in bringing Stietenroth to Washington to spread his charges on the record. The former company officer told a story of taking orders for years from Middle South's Wall Street office—of living what he called a double life as MP&L official.

Stietenroth claimed that Middle South by voting itself a stock dividend kept MP&L rates in Mississippi higher than those of other firms.

Dixon retorted that if Stietenroth "has any knowledge or evidence of wrongdoing, his public duty has been and is to institute legal proceedings." He added that in a group as large as the "10,000 fine people in the Middle South team," it is inevitable that "occasionally one will not measure up," whether because of "ill health, personal worries, jealousy, dissatisfaction at not being promoted, or any one of dozens of reasons."

• Going Ahead—In spite of all the uproar, the Administration shows no signs of wavering. This week, the AEC and the Dixon-Yates group settled on a final draft of the proposed contract. And Chairman Sterling Cole of the Congressional Joint Atomic Committee called hearings for Oct. 13 to consider the proposal. Technically, the joint committee must waive a requirement that Congress must have 30 days in session to consider such contracts before they can be signed.

Cole has the votes to put the contract over, if enough members show up to vote. But public power groups, making the most of their new ammunition, will fight the waiver with everything they have.



GERMAN POLICE are trained to military standards. They will be the core of a new . . .

GERMAN REARMAMENT:

Europe Changed In Getting It

In London last week, the Western allies finally found what they had been looking for ever since the outbreak of the cold war: a workable plan for defending Western Europe against Russia. The plan is built around the rearmament of West Germany under safeguards that even the French are expected to approve.

"One of the greatest diplomatic achievements of our time," Pres. Eisenhower called the London Act. Certainly if the plan is ratified by Bonn and Paris, as expected, it will make West Germany an effective partner in the North Atlantic Treaty Organization.

The new plan lacks the supranational elements of the European Defense Community—the pooling of manpower and resources—but it brings Britain more closely into Continental defense and gives the U.S. a renewed and in some ways stronger Atlantic alliance.

• **German Arms**—The London agreement came only a month after the EDC fiasco in the French Assembly. The French had rejected EDC out of fear that the Germans would dominate it. But Paris never denied that the West needs Germany's strength on the first line of defense against Russia.

What the French have insisted on is a setup that would provide some way of counterbalancing the resurgent strength of Germany.

This problem was resolved when Britain promised to keep its four ground divisions and a tactical air force on the Continent indefinitely. After this commitment—a sharp break from earlier British policy—the London plan had clear sailing.

• **The Differences**—If EDC had gone through, there would have been a six-nation joint army, internationally administered and built around a Franco-German military partnership (the other four nations were Italy and Benelux countries).

EDC's army would have fitted into NATO, would have had about the same kind of ties to Britain as to the U.S. Perhaps Washington would have had more to say about EDC than London would, though, because the U.S. would be contributing arms to the joint army.

Now there's to be a looser but broader military setup in Western Europe—the Brussels Treaty Organization. This includes the six EDC nations plus Britain. It amounts to a new version of the 1948 Brussels Pact among

France, Britain, and the Benelux countries, expanded to include Italy and West Germany.

Under the new plan, there's no joint army—each nation directs its own military forces—but Britain moves into Continental Europe to hold the balance between France and Germany. NATO now has two chief elements, the U.S. and a British-umpired European alliance, instead of the original tripod of EDC, the U.S., and Britain.

• **British Stand**—Britain's pledge to keep its forces on the Continent commits London to the kind of responsibilities in Europe that it has always refused to accept in the past. In both military and political terms it means that Britain will probably be spokesman for the West Europe sector of NATO.

This will involve something close to a revival of the old British-French entente, but not on the equality basis of the past. Instead, London will be holding the hand of Paris in major disputes with West Germany.

• **Unification**—This isn't the kind of European setup that the U.S. has been after since the cold war started. EDC would have been nearer our ideal. Washington looked on EDC as much

more than a military device—the joint army and the Schuman coal-steel pool were to be the nucleus of a political and economic union that would end the age-old feud between the Germans and the French.

Secy. of State John Foster Dulles intends to keep pushing for this kind of integration, through the Brussels Treaty Organization. For the time being, however, there's no doubt that the U.S. has had to sidetrack its push for European unification for the sake of getting a measure of European unity right now. This was inevitable the moment France howled down EDC in its fear that West Germany would dominate such an international organization.

• **Gains**—In this whole business, there's one outstanding gain for the U.S. That is the new British commitment in Europe. It means a continuation of the close teamwork between Dulles and British Foreign Secy. Anthony Eden that marked the London meeting. It means Britain is now strong enough to play the strategic role in Europe that Americans had expected of it in the early postwar years.

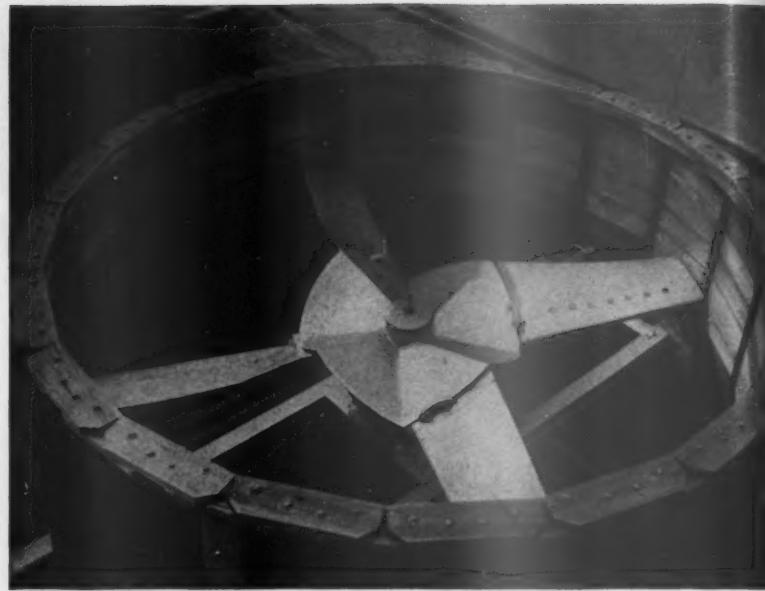
It means, too, that Eden has dropped the idea that Churchill vainly promoted at the Bermuda conference: negotiate with Russia before bringing West Germany solidly into the Western alliance. The U.S. opposed this idea.

West Germany is to join NATO and the new Brussels Treaty Organization as an equal partner in both. Its rearmament is to get under way early next year, within BRUTO's European arms pool. German forces will be jointly controlled by BRUTO and NATO. And even before the arms buildup, Bonn will be given almost complete sovereignty, whereupon the Western occupation will end.

• **Personal Victories**—In the give-and-take that produced the London Act, there were diplomatic and political victories for everyone, not just Dulles and Eden.

Chancellor Konrad Adenauer of West Germany helped the conference over a sticky spot—the question of somehow limiting German arms manufacture—by volunteering a guarantee that West Germany would not build jet bombers or atomic or chemical weapons. He thus helped gain his main purpose, a sovereign West Germany firmly linked to the West.

Premier Mendes-France could claim a victory, too: getting the British to stand with France on the Continent as a counter-weight to Germany. This is far more important to most Frenchmen than the Versailles-type controls that Mendes-France first tried to impose on West Germany. With the danger ended that France will stand alone on the Continent, Mendes-France can probably get the agreements ratified.



Giant Fan Is Emergency Lung . . .



. . . For New Atom-Resisting Lab

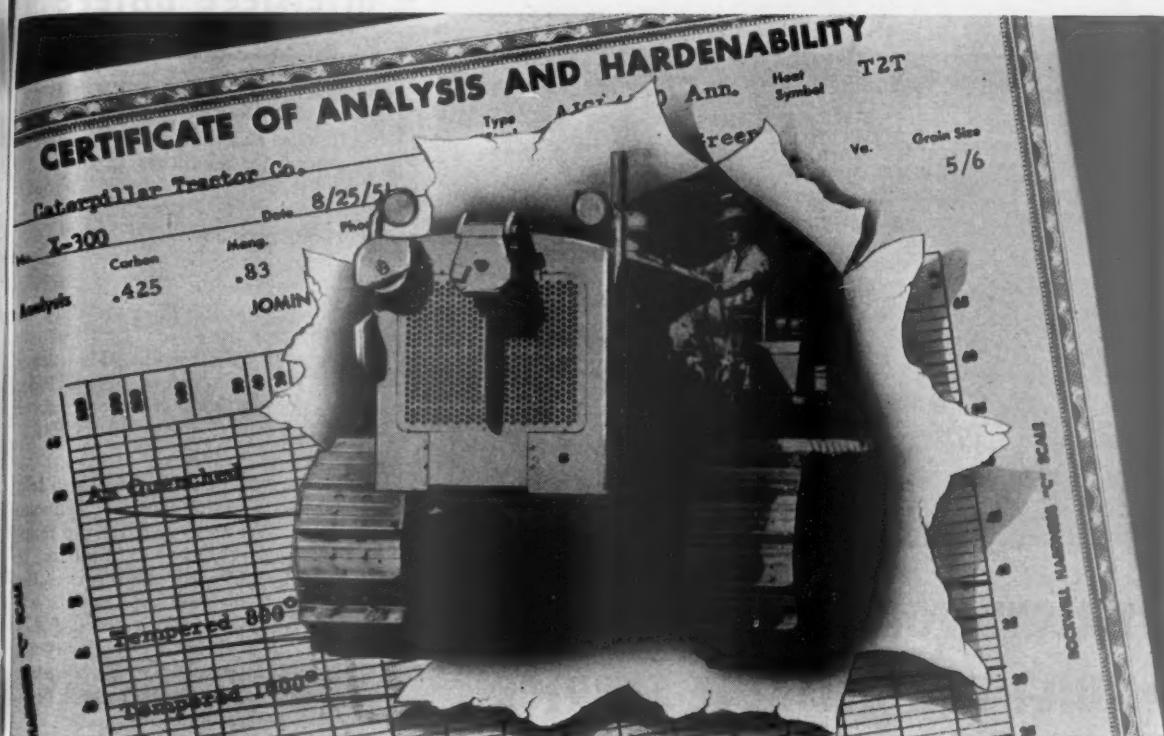
This fortress-like headquarters for the Armed Forces Institute of Pathology, at Walter Reed Medical Center, five miles from downtown Washington, is the latest in defense building. For large structures housing any operations related to atomic attack, bomb-resistance will now be in order.

The institute people, who will move in around the first of the year, shy away from the term "atom-proof" but O.K. "atomic-bomb-resistant." At any rate, it's built to hold up even if bombs fall

on downtown Washington; the wall facing that way has twice the resistance of the others.

The central windowless box of reinforced concrete has three underground floors (the end wings are expendable), and facilities for air conditioning and filtering, water, electric power. Windowless rooms have bright lighting, warm colors for decoration.

The institute combines military, civilian, and Atomic Energy Commission agencies on pathology of diseases.



Caterpillar quality control inspires Ryerson certification

It was 1935—Caterpillar pioneering in quality control—was concerned about the uniform quality of alloy steels from warehouse stock.

Ryerson wished to serve its customers in the best possible manner. We sent our metallurgists to Caterpillar and asked them what could be done that wasn't being done.

Caterpillar pointed out that in the heat treatment of parts there can be as much difference in behavior between two mill heats of the *same* type composition as between two heats of *different* type composition. To emphasize this fact, they cited a statement in the AISI Manual that it would be false and misleading to assume all steels of a given composition are the same.

Ryerson accepted the challenge and began laying the groundwork for a quality control program which would include—1. selecting mill heats, 2. spark testing and carefully segregating every heat, 3. identifying each heat by heat symbol, 4. color marking for AISI number, 5.

testing for hardenability in our own laboratory, 6. interpreting hardenability, 7. final inspection before shipment, 8. furnishing Certificate of analysis and guide to heat treatment.

After two years of preparation—we announced the Ryerson Certified Alloy Steel Plan in 1937. And now—not only Caterpillar but all other alloy steel users can buy high uniform quality alloys from Ryerson warehouse stocks with complete confidence. The plan takes time and money but has been helpful to Caterpillar—and we believe—even more helpful to companies without the elaborate testing facilities of Caterpillar Tractor Co.

It just happens that Ryerson is one of four companies that have been serving Caterpillar since their founding—so we are particularly happy to tell this story of progress in quality control—inspired by Caterpillar on this, their 50th anniversary of service to America and to the world.

Principal products: Bars, structurals, plates, sheets, tubing, alloys, stainless, reinforcing, machinery, & tools, etc.

RYERSON STEEL

JOSEPH T. RYERSON & SON, INC. PLANTS AT: NEW YORK • BOSTON • PHILADELPHIA • CHARLOTTE, N. C. • CINCINNATI • CLEVELAND
DETROIT • PITTSBURGH • BUFFALO • CHICAGO • MILWAUKEE • ST. LOUIS • LOS ANGELES • SAN FRANCISCO • SPOKANE • SEATTLE

BUSINESS BRIEFS



PRICED FOR ECONOMY... BUILT FOR RELIABLE SERVICE

Series "D" *Load Lifter*® Cranes

Never before has so much value been engineered into a crane at the low prices of the Series "D" All-Electric 'Load Lifter' Cranes. They are standardized and mass-produced for average industrial service, yet every type and capacity has design and construction features like those built into all "Shaw-Box" Heavy-Duty Cranes.

The dependable performance of Series "D" 'Load Lifter' Cranes will be remembered long after the price is forgotten. *Three-girder* bridge construction assures rigidity that prevents whipping and skewing. The bridge and trolley wheel axles rotate on anti-friction bearings. Every bearing is a ball or roller bearing. All gearing operates in oil in sealed housings. The motor and drive shaft are permanently aligned. Man, load and crane are completely protected by safety devices.

You can be sure of economical operation, minimum maintenance, and dependable everyday service when you invest in a Series "D" 'Load Lifter' Crane. Capacities range from 1 to 20 tons. Three basic types and three trolley styles available. Floor-operated and cage-controlled models. Selection is easy. Write for Catalog 221, then choose the capacity, type and style to meet your needs.

Load Lifter® CRANES



MANNING, MAXWELL & MOORE, INC. Muskegon, Michigan
Builders of "Shaw-Box" and 'Load Lifter' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of 'Ashcroft' Gauges, 'Hancock' Valves, 'Consolidated' Safety and Relief Valves, and 'American' Industrial Instruments, and Aircraft Products.

Skimpier earnings were recorded in August for Americans collectively. The Commerce Dept. figures that personal income for the month was at an annual rate of \$285.4-billion; that's \$300-million below the July rate, and \$1-billion under the previous August.

Clearing the decks: International Harvester has pruned \$43.75 to \$271 off the suggested list prices of all but one of its smaller farm tractors. The idea is to get rid of inventory before 1955; there's a report that Harvester will come out with a new line of small tractors.

Palm Beach Co., which makes and sells the trademarked summer suits, is due to have a familiar hand back on the reins. Palm Beach Co. is a subsidiary of Goodall-Sanford, which weaves the Palm Beach material and which was sold to Burlington Mills (BW-Jul.17 '54,p32). Now Bur-Mil says it intends to sell Palm Beach Co. to a group headed by Elmer Ward, former president of Goodall-Sanford.

The Port of New York this week lost one of the four transport tugboat companies that move ships in the harbor (BW-Oct.3 '53p88). Moran Towing & Transportation Co., the biggest operator, bought out Meseck Towing Lines, the smallest.

Arnel, a new synthetic textile fiber, has been unveiled by Celanese Corp. of America. Celanese says Arnel combines many of the properties of other new synthetics and costs much less.

British are coming: Courtaulds, Ltd., major British textile maker, says it will triple the capacity of its Le Moyne (Ala.) plant for producing viscose rayon staple. The plant now produces 50-million lb. per year. Courtaulds hopes to double this by next spring, with the rest of the expansion due later.

Tubeless tires will be standard equipment on all 1955 models of Chrysler Corp., following the lead set by Studebaker-Packard. Meanwhile, General Tire & Rubber has boosted price of some of its tubeless tires by from 5% to 8%. The company predicts that prices of all tires will go up soon.

Passing the word: The Defense Dept. is planning wider distribution of information of coming military procurement. The new plan should be of especial help to small businesses not on the "established sources list."

led in Au-
vely. The
t personal
an annual
\$300-mil-
\$1-billion

onal Har-
\$271 off
1 but one
he idea is
ore 1955;
will come
tractors.

s and sells
is due to
the reins.
sidiary of
aves the
hich was
N-Jul.17
it intends
a group
ner presi-

week lost
boat com-
the harbor
Towing &
est oper-
ng Lines,

fiber, has
Corp. of
combines
ther new

ds, Ltd.,
ys it will
e Moyne
ose rayon
es 50-mil-
hopes to
in the rest

d equip-
Chrysler
y Stude-
General
price of
rom 5%
cts that
on.

Dept. is
information.
cial help
e "estab-



✓E means ✓Economy

for all phases of your accounting

with the Low-Cost

Underwood Sundstrand Model ✓E

Here are the facts . . . short and sweet:

10-Key Touch-operated Keyboard. Mechanical Brain controls all automatic operations. Fast Front-Feed Carriage. Direct subtraction in all crossfooters. All subtotals, totals and balances printed automatically. Easy to learn. Simple to operate.

What can you do with this low-cost machine? Just about every posting

job that will ever come up in your business! Accounts Receivable, Accounts Payable, Trial Balances, Payroll Records, Stock Records, Sales Analysis Records . . . and many other applications.

Get the rest of the story from your Underwood Accounting Machine Representative. The local Underwood Office is listed in the classified pages of your telephone directory.

Underwood Sundstrand
The Original
Touch Method
Keyboard

Underwood Corporation

Accounting Machines . . .
Adding Machines . . .
Typewriters . . . Ribbons
. . . Carbon Paper . . .
Punched Card Equipment . . .
Electronic Computers
One Park Avenue
New York 16, N. Y.
Underwood Limited
Toronto 1, Canada
Sales and Service Everywhere





BUSINESS BRIEFS

Skimpier earnings were recorded in August for Americans collectively. The Commerce Dept. figures that personal income for the month was at an annual rate of \$285.4-billion; that's \$300-million below the July rate, and \$1-billion under the previous August.

Clearing the decks: International Harvester has pruned \$43.75 to \$271 off the suggested list prices of all but one of its smaller farm tractors. The idea is to get rid of inventory before 1955; there's a report that Harvester will come out with a new line of small tractors.

Palm Beach Co., which makes and sells the trademarked summer suits, is due to have a familiar hand back on the reins. Palm Beach Co. is a subsidiary of Goodall-Sanford, which weaves the Palm Beach material and which was sold to Burlington Mills (BW-Jul.17 '54, p32). Now Bur-Mil says it intends to sell Palm Beach Co. to a group headed by Elmer Ward, former president of Goodall-Sanford.

The Port of New York this week lost one of the four transport tugboat companies that move ships in the harbor (BW-Oct. 3 '53 p88). Moran Towing & Transportation Co., the biggest operator, bought out Meseck Towing Lines, the smallest.

Arnel, a new synthetic textile fiber, has been unveiled by Celanese Corp. of America. Celanese says Arnel combines many of the properties of other new synthetics and costs much less.

British are coming: Courtaulds, Ltd., major British textile maker, says it will triple the capacity of its Le Moyne (Ala.) plant for producing viscose rayon staple. The plant now produces 50-million lb. per year. Courtaulds hopes to double this by next spring, with the rest of the expansion due later.

Tubeless tires will be standard equipment on all 1955 models of Chrysler Corp., following the lead set by Studebaker-Packard. Meanwhile, General Tire & Rubber has boosted price of some of its tubeless tires by from 5% to 8%. The company predicts that prices of all tires will go up soon.

Passing the word: The Defense Dept. is planning wider distribution of information of coming military procurement. The new plan should be of especial help to small businesses not on the "established sources list."

PRICED FOR ECONOMY... BUILT FOR RELIABLE SERVICE

Series "D" *Load Lifter*® Cranes

Never before has so much value been engineered into a crane at the low prices of the Series "D" All-Electric 'Load Lifter' Cranes. They are standardized and mass-produced for average industrial service, yet every type and capacity has design and construction features like those built into all "Shaw-Box" Heavy-Duty Cranes.

The dependable performance of Series "D" 'Load Lifter' Cranes will be remembered long after the price is forgotten. *Three-girder* bridge construction assures rigidity that prevents whipping and skewing. The bridge and trolley wheel axles rotate on anti-friction bearings. Every bearing is a ball or roller bearing. All gearing operates in oil in sealed housings. The motor and drive shaft are permanently aligned. Man, load and crane are completely protected by safety devices.

You can be sure of economical operation, minimum maintenance, and dependable everyday service when you invest in a Series "D" 'Load Lifter' Crane. Capacities range from 1 to 20 tons. Three basic types and three trolley styles available. Floor-operated and cage-controlled models. Selection is easy. Write for Catalog 221, then choose the capacity, type and style to meet your needs.

Load Lifter® CRANES



MANNING, MAXWELL & MOORE, INC. Muskegon, Michigan
Builders of "Shaw-Box" and 'Load Lifter' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of 'Ashcroft' Gauges, 'Hancock' Valves, 'Consolidated' Safety and Relief Valves, and 'American' Industrial Instruments, and Aircraft Products.

FS

ed in Au-
ely. The
personal
an annual
\$300-mil-
\$1-billion

onal Har-
\$271 off
but one
the idea is
ore 1955;
will come
tractors.

and sells
is due to
the reins.
diary of
aves the
hich was
V-Jul.17
t intends
a group
ner presi-

week lost
boat com-
the harbor
Towing &
est oper-
ng Lines,

fiber, has
Corp. of
combines
ther new

ds, Ltd.,
ys it will
e Moyne
ose rayon
es 50-mil-
hopes to
n the rest

rd equip-
Chrysler
by Stude-
General
the price of
from 5%
icts that
on.

Dept. is
information
special help
e "estab-

et. 9, 1954



✓E means ✓Economy

for all phases of your accounting
with the Low-Cost

Underwood Sundstrand Model ✓E

Here are the facts . . . short and sweet:

10-Key Touch-operated Keyboard. Mechanical Brain controls all automatic operations. Fast Front-Feed Carriage. Direct subtraction in all crossfooters. All subtotals, totals and balances printed automatically. Easy to learn. Simple to operate.

What can you do with this low-cost machine? Just about every posting

job that will ever come up in your business! Accounts Receivable, Accounts Payable, Trial Balances, Payroll Records, Stock Records, Sales Analysis Records . . . and many other applications.

Get the rest of the story from your Underwood Accounting Machine Representative. The local Underwood Office is listed in the classified pages of your telephone directory.

Underwood Sundstrand
The Original
Touch Method
Keyboard

Underwood Corporation

Accounting Machines . . .
Adding Machines . . .
Typewriters . . . Ribbons
. . . Carbon Paper . . .
Punched Card Equipment . . .
Electronic Computers
One Park Avenue
New York 16, N. Y.
Underwood Limited
Toronto 1, Canada
Sales and Service Everywhere





at
Northland Center
 . . . world's largest
 regional shopping center

*Architect: VICTOR GRUEN, Associated Architects and Engineers, Inc.
 Chief Mechanical Engineer: JOSEPH D. OLIVIERI
 Consulting Mechanical Engineers: H. E. BEYSTER & ASSOCIATES, INC.
 General Contractor: BRYANT AND DETWILLER CO.
 Plumbing and Heating Contractor: THE DONALD MILLER COMPANY
 Air Conditioning Contractor: CARRIER CORPORATION*

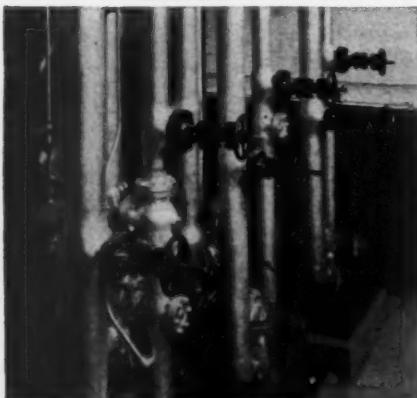
JENKINS VALVES
 control 50 miles of piping



Detroit's new \$30,000,000 Northland Center is a shopper's dream. Centered in a parking space for 8341 cars, more than a mile of stores permit "one-stop" shopping for any merchandise or services desired.

Every facility at Northland was planned to provide cost-saving efficiency for store operators along with exceptional comfort and convenience for shoppers. Many design and engineering innovations were required, notably in the plumbing, heating, air conditioning, and fire protection systems. Jenkins Valves were chosen for thousands of control points on the 50-mile network of piping involved to assure trouble-free performance, safety, and long-range maintenance savings.

This confidence in the extra measure of efficiency and economy provided by Jenkins Valves is shared by leading architects, engineers, and contractors in every field of construction. Despite this extra value, *you pay no more for Jenkins Valves.*



JENKINS VALVES installed at Northland Center include all types of bronze valves, as well as iron and steel valves up to 24" diameter. Above are valves controlling flow through boiler feed pumps at the steam generating plant. Refrigerating equipment in this same central power house provides chilled water for cooling, which is piped and metered to all stores, at the rate of 10,000,000 gallons per day. Water needs equal those of a city of 50,000 population. Fire protection system includes 5000 automatic sprinklers and 25 hydrants, served by 200,000 gallon water tank.

JENKINS
 LOOK FOR THE DIAMOND MARK
VALVES



For new installations,
 for all replacements,
 let the Jenkins Diamond
 be your guide to
 lasting valve economy.
 Jenkins Bros., 100 Park Ave.,
 New York 17.

SOLD THROUGH LEADING INDUSTRIAL DISTRIBUTORS

op-
ars,
any

ing
and
in-
air
were
k of
and

omy
en-
pite

nd
rk Ave.,



WASHINGTON OUTLOOK

WASHINGTON
BUREAU
OCT. 9, 1954



There's controversy over Pres. Eisenhower's campaign role. The situation, with the House and Senate at stake Nov. 2, is this:

The big push for "more-politicizing-by-Ike" comes from local leaders, in states and districts with doubtful races. Behind it is the feeling that participation by Eisenhower is necessary to head off the Democrats.

Many top White House politicians are afraid of this. They're advising the President not to beat the bushes "like he's running for sheriff."

Considerations behind the pulling and hauling: Eisenhower's popularity is considered the top asset of the Republicans at this stage. The local leaders see it as the thing that can bring them victory. National leaders, however, are looking ahead to 1956. The White House will be the prize then. Many of them think it would be a mistake to make the House and Senate races a test of the President's pull. If the party fails to come through now, Eisenhower's chances in 1956 would surely be hurt. The upshot will be that Eisenhower will stick to national appeals without getting into individual state races. He plans a spectacular election-eve finish to tip the balance.

The Democratic attack on foreign policy is blunted to some extent by the new agreements on Southeast Asia (SEATO) and arming of Germany (page 31). Each of these is regarded as a step toward strengthening of weak spots left by the Truman Administration. The German deal won't mean extra burdens for U. S. taxpayers—a good political talking point. Most of the arms already have been produced.

Unemployment may be the determining factor in November, despite talk of farm prices, business favoritism, public vs. private power, and the like (page 30).

It figures in 25 close house contests—about 50% of the House seats that are regarded as fighting ground. These involve areas where unemployment is 6% or higher and where seats were won by no more than 5% in 1952.

The GOP now holds the majority of these districts. It represents 14. The Democrats represent 10. An independent, Reams, of Ohio, has the other. All are in states where the two-party system is very strong.

Look at Pennsylvania, for example: It has seven marginal House seats, won in 1952 by not more than 5% of the vote cast. Each district has surplus labor.

The political distribution of seats. Five are held by Republicans, two by Democrats. Statewide, Democrats figure this to be a year of "comeback."

West Virginia is next in doubtful seats where unemployment figures. It has four. Only one, Neal's (Huntington-Parkersburg) is Republican.

Other close seats, with unemployment, are scattered. But most are held by the GOP. A run-down of the House members, with surplus labor towns: Crumpacker, R., Ind., Laporte-Michigan City, South Bend (page 62); Oakman, R., Mich., Detroit; Bow, R., Ohio, Canton; Reams, Independent, Ohio, Toledo; Bishop, R., Ill., Herrin; Merrill, R., Ind., Evansville; Cole, R., Mo., St. Joseph; Wampler, R., Va., Big Stone Gap; Poff, R., Va., Covington; O'Brien, D., N. Y., Albany; Fogarty and Forand, D., R. I., Providence; and Dempsey and Fernandez, D., N. M., Albuquerque.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
OCT. 9, 1954

The GOP is reaching into the pork barrel. Any election implications are denied, of course. Nevertheless, projects are being pushed out.

Local airports are getting \$20.5-million of federal funds. The states that get the most are California, Kentucky (Barkley fighting Cooper), Ohio, Minnesota, New York.

School building money is going out, too. California tops the list. It will get nearly \$20-million for some 60 projects.

—•—
A stepup in defense buying is expected, with orders going into areas where there's surplus labor. These areas have preference. But up to now, the orders have been slow going out. Politicians are complaining.

Orders to Detroit have been slow. Plans to buy combat vehicles were announced months ago. Chrysler, in a labor surplus area, only recently got an order of \$106.5-million for tanks.

Textile and other buying is being pushed. But there's reluctance on the part of Pentagon buyers to be persuaded by unemployment statistics. With money cut, defense buyers shop around to get the "most-for-the-money." They look on surplus labor as a secondary consideration.

—•—
The Mitchell-Weeks feud (page 166) doesn't reflect any big split in Eisenhower's Cabinet. It's merely disagreement between two members.

Mitchell speaks for labor, where official policy is concerned. He isn't able to persuade the Cabinet to his point of view on all issues. But he is the big influence with Eisenhower on labor matters.

Weeks as Commerce Secy. speaks for business. He involves himself in labor matters because labor policy does cut across the whole field of business. But his stands frequently are too conservative for Cabinet colleagues.

—•—
Union leaders are making Mitchell's job tougher. They are not giving the Labor Secy. their backing, even where his fight is on their side. This weakens Mitchell in Congress.

—•—
Regulations interpreting the new tax law are beginning to come out. There are two you will want to pay some attention to.

On fast amortization, you have until Oct. 28 to propose any changes you may think necessary in the tentative rules. You may write your views to the Commissioner of Internal Revenue, Washington 25, D. C.

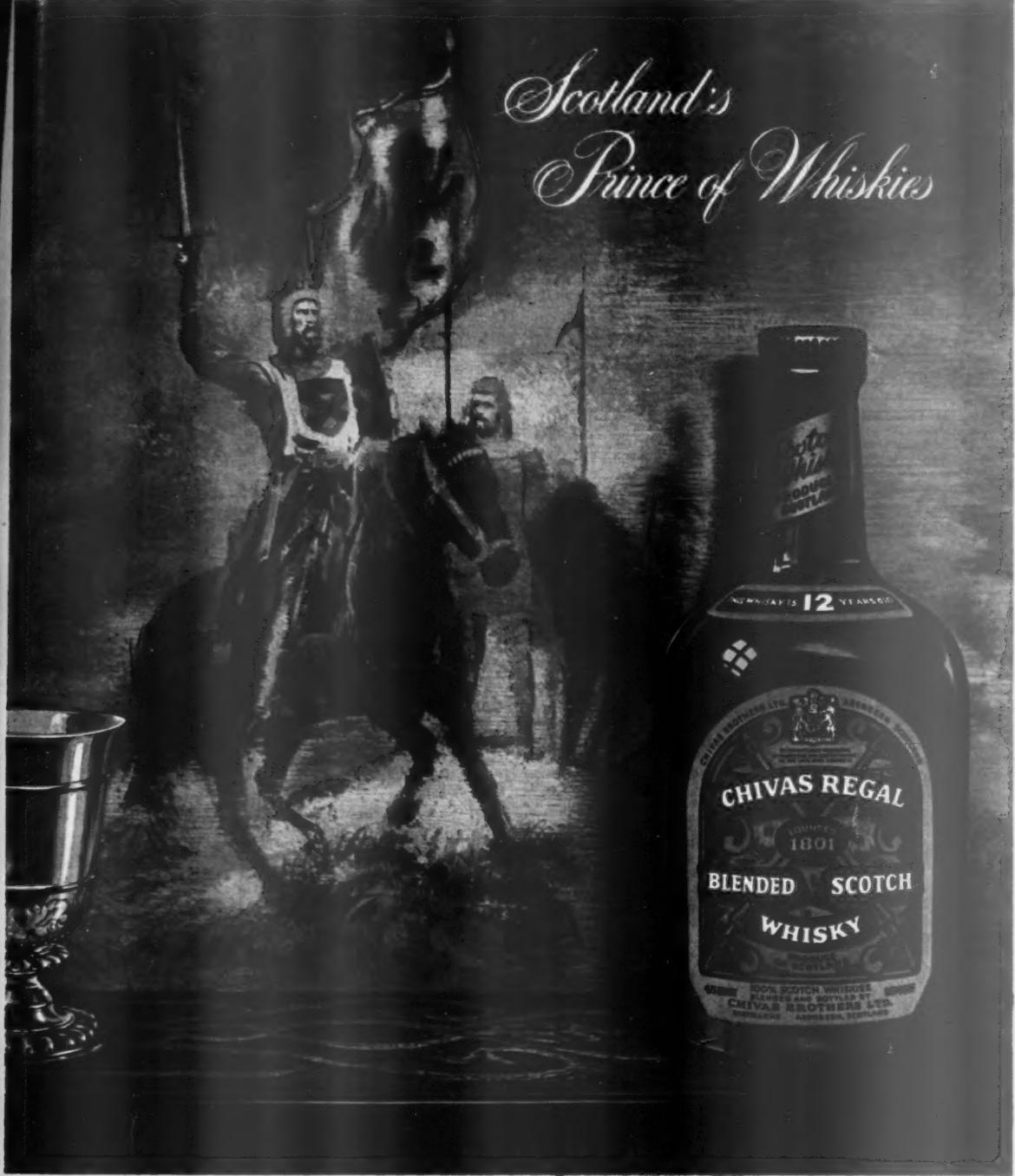
Take a look at the sick pay regulations. Most companies allow time off for sick employees. But with many it is an informal policy. With a plan, employees may be exempted from taxes on sick pay. But you need a formal plan.

A new court test of the merger control law may grow out of the ruling by the Justice Dept. that a Bethlehem-Youngstown Steel consolidation would violate the statute (page 25). The department's ruling is advisory. The two companies may go ahead with their merger plans. If they do, then Justice will take the issue to court.

—•—
The Treasury plans its next big financing for December. At that time, it will refund some \$17-billion of maturing debt and may raise some new money—upwards of \$2-billion. But any long-term issue seems to be out of the picture. It would compete for investment funds with home building, public works and industrial expansion.



Scotland's Prince of Whiskies



1801 • 1954 Chivas Brothers Ltd. of Aberdeen, Scotland,

in their one hundred and fifty-third year of business, send greetings and thanks to their growing host of American friends. It is a source of deep gratification to them that their finest product, 12 year old Chivas Regal, has become the most wanted premium Scotch whisky purveyed in the United States.

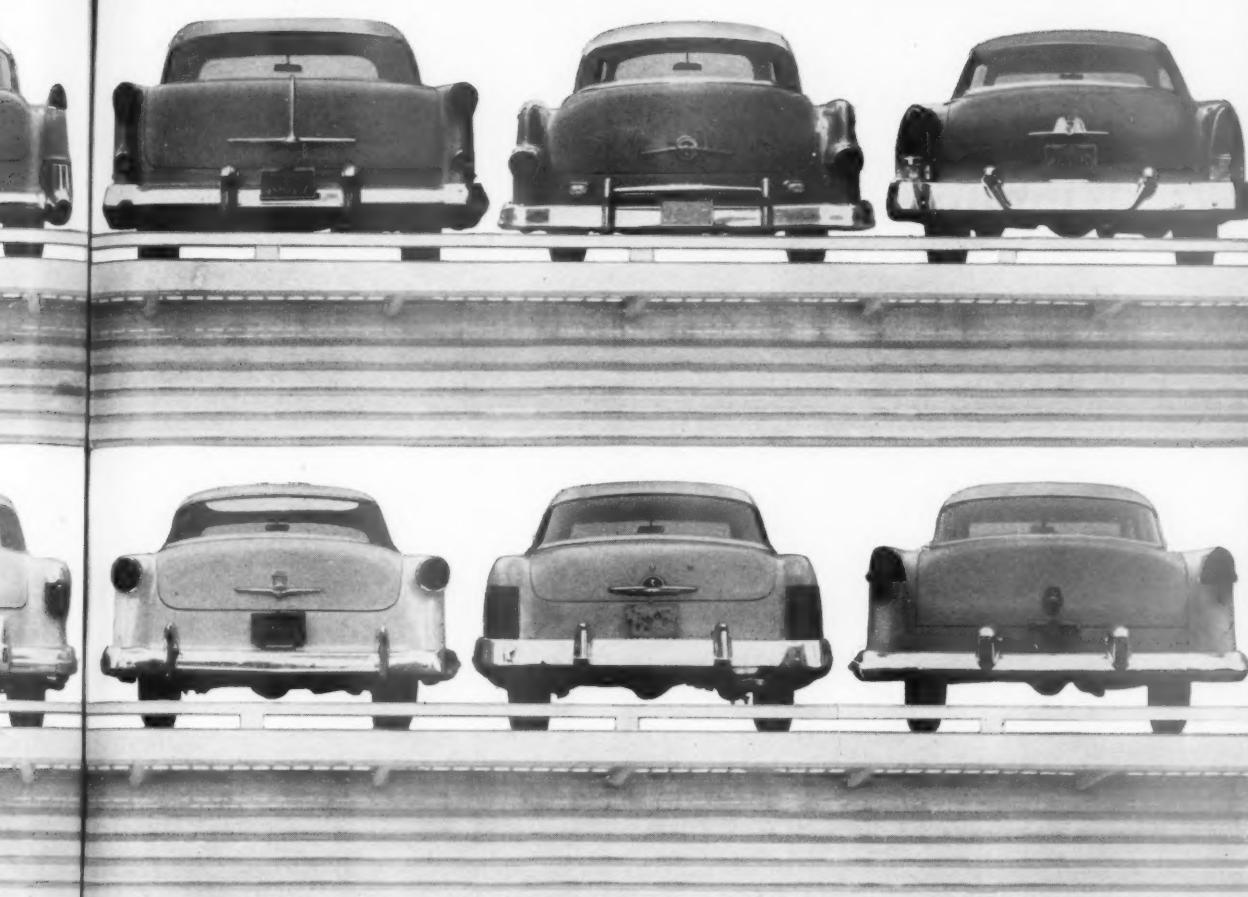


CHIVAS BROTHERS LTD. of Aberdeen,
Scotland. Established 1801. By Appoint-
ment Purveyors of Provisions and Scotch
Whisky to the late King George VI.

BLENDED SCOTCH WHISKY • 86 PROOF • CHIVAS BROTHERS IMPORT CORP. • NEW YORK, N. Y.



Canadian distributor: *Crystal Glass and Plastics, Ltd., 130 Queen's Quay at Jarvis Street, Toronto, Ontario, Canada.*



The power to sell is molded in **PLEXIGLAS**

Car manufacturers use PLEXIGLAS® for tail lights—and nameplates, dials, medallions, transparent roof sections—because they want the highest degree of durability and beauty. They know this acrylic plastic adds the final note of quality that attracts customers.

PLEXIGLAS does the same job for manufacturers of refrigerators, washing

machines, air conditioners, radio and television sets. It can be molded accurately into complex shapes. It gives molded parts outstanding resistance to breakage, discoloration and weather. Of all types of plastics, PLEXIGLAS is unsurpassed for attractive appearance.

You can add sales appeal to your product with PLEXIGLAS. We will be glad to tell you how.

Our new brochure, "Molding Powder Product Design," will be sent to you promptly on request.

CHEMICALS  FOR INDUSTRY

**ROHM & HAAS
COMPANY**

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries



Shocks as Strong
as Lightning Bolts ...

MALLORY CONTACTS frequently are called upon to take
punishment several times that of a lightning bolt

Power transmission lines are guarded all the way from the generating plant to your home by automatic circuit breakers. They react in a split second whenever trouble develops, protecting the rest of the system from damaging overloads by breaking the circuit.



When the contacts open in a breaker, a searing arc jumps the gap. It has such explosive force that temperatures skyrocket to as much as 10,000 degrees—high enough to vaporize ordinary metals! Yet Elkonite contacts no bigger than a silver dollar survive this shock and are ready for service again the moment trouble on the system has been cleared.

Elkonite is a series of unique materials, developed by Mallory, which combines metals that will not alloy.

Thus Elkonite merges the arc-resistance of refractory metals, such as tungsten, molybdenum, or their carbides with the high current-carrying ability of silver or copper. Elkonite contacts are the accepted standard for all heavy-duty circuit-interrupting equipment.



Mallory Contacts serve in almost every kind of electrical device. Other products of Mallory powder metallurgy include longer-lasting resistance welding electrodes, more compact rotors in gyroscopes, more effective shielding for radioactive materials.



These developments reflect the creative engineering and precision production which have always been basic in Mallory activities in its fields of electronics, electrochemistry and specialized metallurgy.

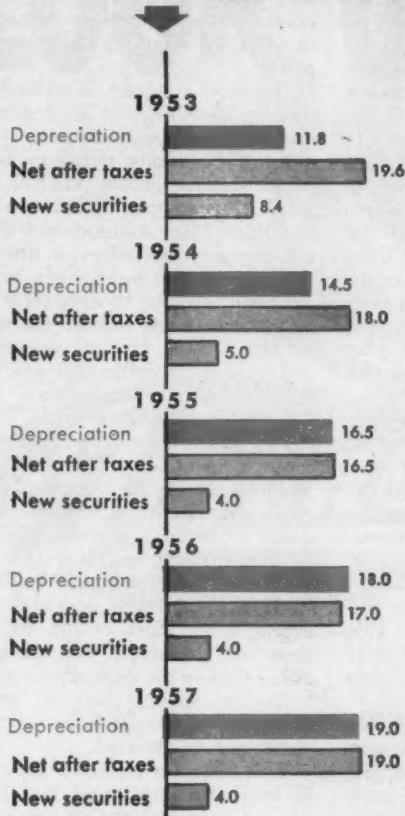
MALLORY
SERVING INDUSTRY WITH THESE PRODUCTS:
Aeronautical • Automotive • Chemical • Electrical • Electronic • Glass • Industrial • Instrument • Medical • Mining • Petroleum • Television • Textile • Vacuum
P. R. MALLORY & CO., Inc. INDIANAPOLIS 6, INDIANA

ELKONITE
Reg. U. S. Pat. Office

MANAGEMENT

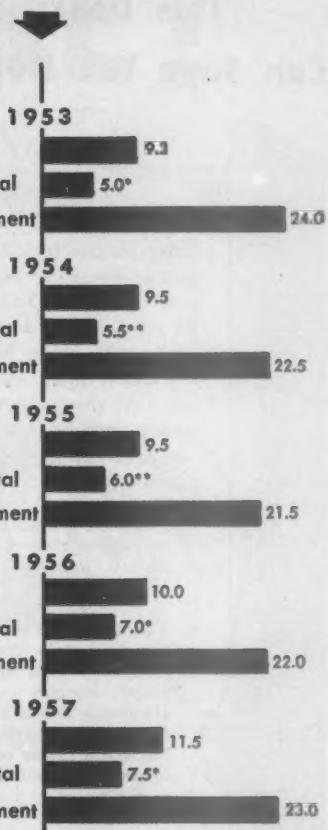
Companies will be piling up more cash from Depreciation

That could mean...



All figures in billions of dollars

... bigger dividends, easier working capital, stable plant & equipment expenditures



*Mostly additions to inventory and trade receivables

**Mostly additions to cash & government securities and reductions in short-term debt

Data: Estimates by McGraw-Hill Economics Dept. June, 1954.

©BUSINESS WEEK

The Money Must Go Somewhere

The charts above illustrate a situation that's going to play a growing part in management's financial decisions.

Ever since World War II, companies have been pouring out dollars for plant and equipment. As a result, they have been scrabbling for money. They have had to retain a big share of earnings, go to the security markets for new capital, and borrow from any source they could tap.

• **Easier**—Now you can see this situation reversing itself. In the next few years, most companies will find themselves in a much easier cash position. That's for three reasons:

- A drop in capital expenditures.
- A rapid increase in funds from depreciation charges against income.
- The end of the long period of building up inventories, which tied up a lot of money.

From this trio of trends, you can see three things that may develop:

- Bigger dividends.
- Reduction of corporate debt.
- A change in depreciation policy.

The top chart shows how important depreciation is. Its annual rate began to loom larger in 1953. It will continue to grow for several years.

Flowback—You can look at depreci-

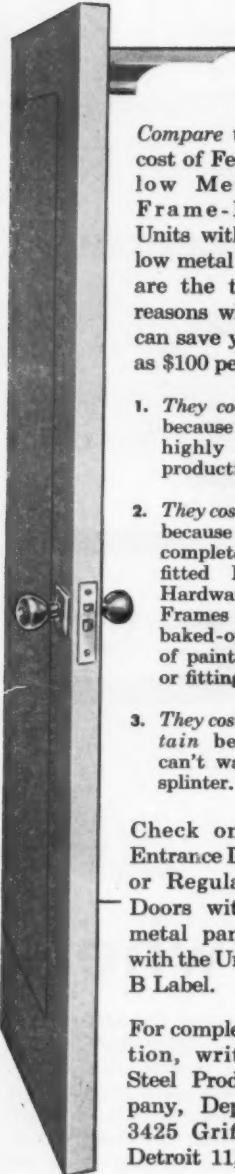
ation in several ways. But however you look at it, the depreciation charges against income provide you with a flowback of dollars spent for plant and equipment in previous years. Management can use that cash one way or another—either by holding it in the bank, or buying government securities, putting it to work for current operations, spending it for new plant or equipment, paying it out in dividends, or reducing liabilities.

On a profit-and-loss statement, depreciation is set up as a charge against income, along with wages, materials, and the other costs of doing business,



"A salute to those who
made it possible" *

This Door Can Save You \$100.00



Compare the installed cost of Fenestra* Hollow Metal Door-Frame-Hardware Units with other hollow metal doors. Here are the three sound reasons why Fenestra can save you as much as \$100 per door:

1. *They cost less to buy* because of Fenestra's highly mechanized production.
2. *They cost less to install* because units come complete with pre-fitted Frames and Hardware. Doors and Frames come with a baked-on prime coat of paint. No cutting or fitting, etc.
3. *They cost less to maintain* because they can't warp, swell or splinter.

Check on Fenestra Entrance Doors, Flush or Regular Interior Doors with glass or metal panels, Doors with the Underwriters' B Label.

For complete information, write Detroit Steel Products Company, Dept. BW-10, 3425 Griffin Street, Detroit 11, Michigan. *

* Your need for lower building costs encouraged us to develop a quality door unit that would save initial cost and installation cost—Fenestra Hollow Metal Door-Frame-Hardware Units . . . a great advancement in building products.

Fenestra

DOOR
FRAME
HARDWARE
UNITS

but unlike wages and materials, depreciation isn't paid out in cash. Take a company with an income of \$1-million. Its wages, raw materials, and interest on debt come to \$750,000—all of which is out of pocket. That leaves \$250,000. Then the company deducts its depreciation charges—say \$100,000—from taxable income. In a sense, this means recapturing \$100,000 it had spent in the past. Taxes are levied only on what's left—\$150,000. Then come dividends, and what is put into retained earnings. And the company still has the \$100,000 depreciation money.

Up to this year, depreciation charges were relatively small. For instance, in 1946 they amounted to about \$4-billion for all U.S. corporations. That was only about 30% of the money those corporations spent for plant and equipment. Last year depreciation was more than \$11-billion and by 1957 it may reach \$19-billion—about 80% of what some economists think is a good estimate of plant and equipment outlays.

This obviously means that management for the first time in years won't have much to worry about when it comes to finding money for capital outlays. In the charts, that shows up in the decline in the amount of money to come from outside sources.

• **Overmuch**—At first glance, this may seem fine. But oddly enough this situation next year and perhaps in 1956 poses a problem of too much depreciation for a good many firms. Here's how it all happened:

Rearmament and the Korean War skyrocketed new plant and equipment programs. To induce this, the government set up its five-year rapid amortization allowances. Instead of getting, say, \$50,000 a year back on a \$1-million plant, a company was allowed to get back \$200,000.

Because of the high excess profits tax and a natural bird-in-the-hand attitude of most management, this fast writeoff was welcomed.

• **New View**—Beginning this year that attitude may change for two reasons.

The first has to do with the earnings report a company makes to its stockholders. It's a safe bet that gross income for a lot of companies isn't going to climb sharply in 1955 or even in 1956. But depreciation charges will. That means net earnings are going to be squeezed. No management likes to send stockholders a report like that—even if it can be explained.

The other reason is this: For many companies there is no pressing need for large capital expenditures.

Up to now, most companies have been able to use all the funds from depreciation charges—and a lot more—for new facilities. But next year, depreciation charges will be so big and the need for them (in the form of cash)

so much smaller that management will find itself tucking away its cash into banks and government securities. You can only earn about 2% on your money that way—and a management doesn't like the idea. It would rather find other places to put that money to work.

• **Dividends**—If management can't find such a place, it may pay out to stockholders a much greater percentage of its earnings. Or it can alter its depreciation policy.

One steel company is seriously considering stretching out its depreciation over a longer period of time.

An oil company chairman has his people working on the problem, which will hit his company hardest in about two years. One solution—and the one the company may adopt—is this: Since tax rates are still pretty high, his company will continue to write off as much as possible on its income tax returns. It pays a 52% tax rate on earnings, and thus every dollar that can be deducted through depreciation before taxes means a gain of 52¢.

But in its report to stockholders, it will write off only 52% of what the government permits. That will cut the depreciation charges against income down to the level it is actually saving in cash on its income taxes.

If earnings hold up or increase, it is quite likely that stockholders can expect a big share of the 48% that then will be added to net income rather than to the depreciation account.

As the bottom chart on page 43 shows, higher dividends by other companies can be expected.

This week, for instance, Capt. Eddie Rickenbacker announced that Eastern Airlines was doubling its annual dividend rate. One reason is the high depreciation charges, now running at about \$25-million a year. That can take care of most of the capital needed for new equipment, so shareholders will get more of the company's earnings.

Still, there is a hesitancy on the part of some management to boost the dividend rate. It sets a precedent hard to break if cash should happen to become tight later on.

So a good many companies will be reducing debt, rather than raising dividends significantly, in order to get rid of extra cash. Dow Chemical Co. has done just that (BW-Sep. 18 '54, p114).

There's nothing temporary about this strong cash position in which companies find themselves. Congress this year passed a new liberal depreciation law that permits a fast writeoff in the early years of new plants and equipment bought after Jan. 1, 1954.

If companies accept that option—and some doubt that they will under present conditions—then depreciation will continue to weigh heavily in management financial decisions.

ent will
sh into
s. You
money
doesn't
d other
work.
n't find
o stock-
age of its
sociation
ly con-
sociation

has his
, which
n about
he one
: Since
is com-
s much
returns.
urnings,
be de-
before

holders,
that the
cut the
income
saving

case, it
ers can
% that
income
account.
age 43
r com-

Eddie
Eastern
1 divi-
gh de-
ng at
at can
needed
ers will
urnings.
e part
e divi-
ard to
ecome

ill be
g divi-
get rid
o. has
(p14).
at this
panies
s year
n law
n the
ment

—and
present
l con-
ment

9, 1954



TWO OF THE GREATEST NAMES IN FIRE PROTECTION HAVE JOINED FORCES

PYRENE and C-O-TWO, world-renowned manufacturers of approved fire protection equipment, are now unified under the same management to give you the finest and most complete line on the market today...

- ★ built-in fire detecting systems that quickly respond to smoke, heat or flame...
- ★ all types of portable fire extinguishers and built-in fire extinguishing systems that kill fire fast...
- ★ plus an expert fire protection engineering service that gives you unbiased advice on what is best for your particular fire hazards.

Don't take unnecessary chances... the combined fire protection experience of PYRENE and C-O-TWO over the years is at your disposal without obligation. Get complete facts today!



P Y R E N E — C - O - T W O
NEWARK 1 • NEW JERSEY

Sales and Service in the Principal Cities of United States and Canada

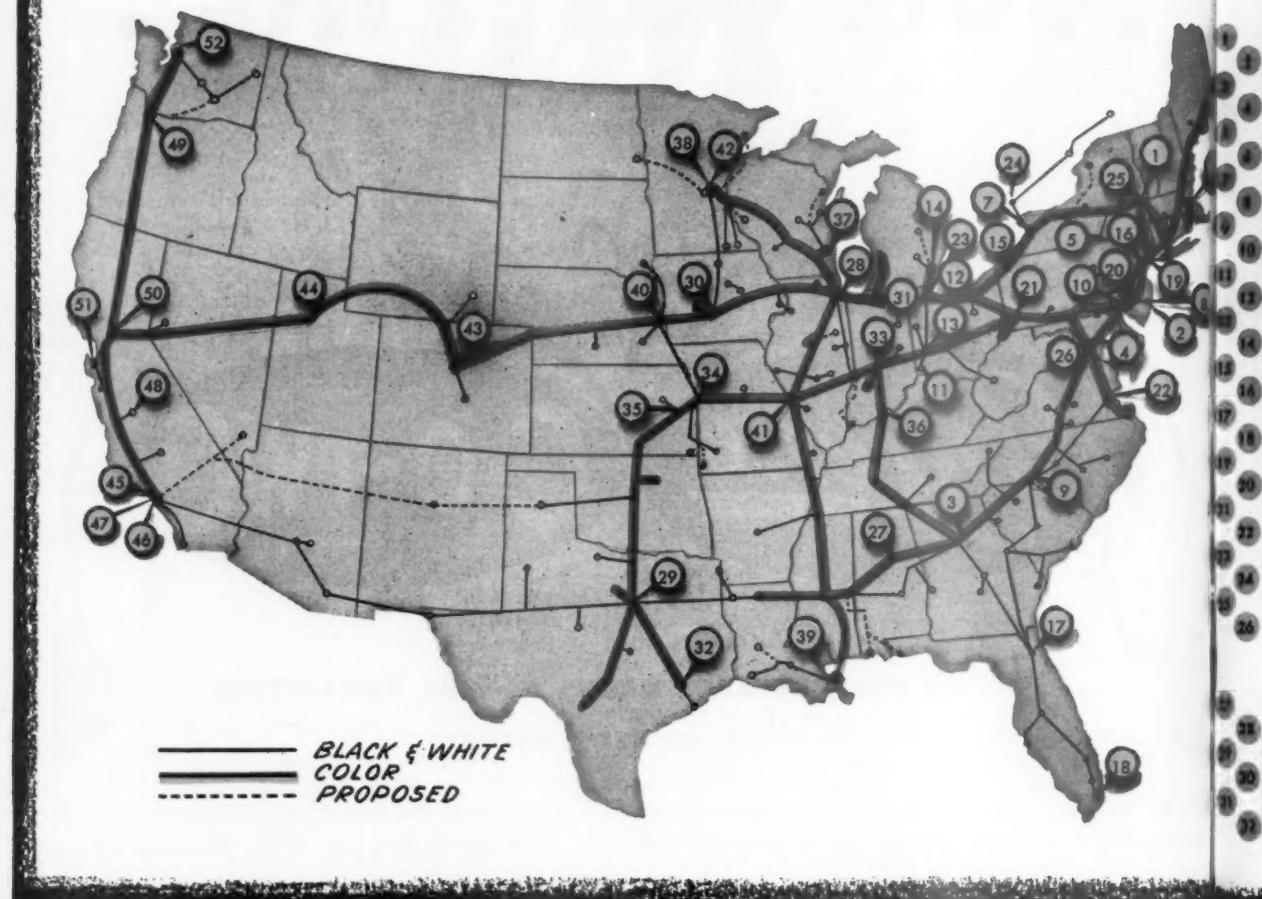
COMPLETE FIRE PROTECTION
portable fire extinguishers... built-in fire detecting and fire extinguishing systems



CARBON DIOXIDE • DRY CHEMICAL • VAPORIZING LIQUID • SODA-ACID • WATER • CHEMICAL FOAM • AIR FOAM

Closed-Circuit TV Covers the Nation

Here's how it reaches and will reach the nation



It Can Put Management's Story On

Next month, General Motors Corp. will be host on a closed-circuit television network for a major (but so far unannounced) celebration in the company. The network will tie 63 cities together simultaneously. At special gathering points, audiences will be able to hear GM's pitch.

This will be by far the biggest use to which the rapidly growing system of closed-circuit TV has been put (BW—Jan. 30 '54, p. 54). It will dramatize just how far the idea of a private TV business hookup, which doesn't go out on the airwaves, has come since Du Mont Television Network arranged a tie-up between New York and Wash-

ington for Chevrolet in 1946. The map and table above show the facilities that exist today for such a setup.

• **Milestones**—That 1946 Chevrolet hookup was probably the first time closed-circuit TV was used for strictly business purposes. After that start, the idea grew slowly. Limited use of it was made for showing overflow crowds at banquets what was going on in the main ballroom. It was also put to work for some educational shows confined to single buildings.

In 1949, Du Mont piped some football games to theatres for big screen showings. Then, in 1950, Du Mont produced a closed-circuit telecast for

Schenley Distributors, Inc., in 38 cities. This wasn't coast-to-coast because the Bell System transmission facilities didn't extend across the continent at that time.

The coast-to-coast cables came in 1951, knitting the whole country together. In 1954, three years later, closed-circuit TV became an accepted tool of business.

• **Two-a-Day**—One day a few weeks ago, for instance, 10,000 physicians sat down to watch a TV show. It was sponsored by the American College of Physicians. Wyeth Laboratories picked up the tab—and gently beat the drum for ansolysen, a new drug it is produc-

vershe Country...

You can hire a permanent installation in...

EASTERN ZONE

City	No. of Theaters	No. of Hotels	Seating Capacity
Albany, N. Y.	1	—	1552
Asbury Park, N. J.	1	—	1558
Atlanta, Ga.	1	—	2476
Baltimore, Md.	4	—	9071
Binghamton, N. Y.	1	—	2284
Boston, Mass.	3	1	7583
Buffalo, N. Y.	1	—	2200
Camden, N. J.	1	—	2186
Charlotte, N. C.	1	—	1405
Chester, Pa.	1	—	2265
Cincinnati, O.	1	1	4037
Cleveland, O.	4	—	13,204
Dayton, O.	1	—	2665
Detroit, Mich.	4	1	13,180
Erie, Pa.	1	—	2584
Ft. Lee, N. J.	1	—	1394
Jacksonville, Fla.	1	—	3155
Miami, Fla.	3	—	5534
New York, N. Y.	6	1	14,213
Philadelphia, Pa.	1	—	2947
Pittsburgh, Pa.	3	—	9311
Richmond, Va.	3	—	4902
Toledo, Ohio	1	—	2455
Toronto	1	—	2240
Troy, N. Y.	1	—	2287
Washington, D. C.	3	—	6829

CENTRAL ZONE

Birmingham, Ala.	1	—	1473
Chicago, Ill.	6	1	17,419
Dallas, Texas	1	—	1295
Des Moines, Ia.	1	—	1708
Gary, Ind.	1	—	2458
Houston, Texas	1	—	2293

City	No. of Theaters	No. of Hotels	Seating Capacity
Indianapolis, Ind.	1	—	3313
Kansas City, Mo.	1	—	1572
Lawrence, Kan.	1	—	922
Louisville, Ky.	1	—	3100
Milwaukee, Wis.	2	—	4867
Minneapolis, Minn.	2	—	5041
New Orleans, La.	1	—	3400
Omaha, Neb.	1	—	2978
St. Louis, Mo.	1	—	3166
St. Paul, Minn.	1	—	2362

MOUNTAIN ZONE

Denver, Colo.	1	—	2096
Salt Lake City, Utah	2	—	2329

PACIFIC ZONE

Beverly Hills, Calif.	2	—	3908
Huntington Park, Calif.	1	—	650
Los Angeles, Calif.	4	—	7357
Fresno, Calif.	—	—	—
Portland, Oregon	1	—	1832
Sacramento, Calif.	1	—	596
San Francisco	2	—	3045
Seattle, Wash.	1	—	2599

All but these states can be reached by portable equipment

Idaho
Montana
New Mexico
North Dakota

©BUSINESS WEEK

Over Fast—at a Price

ing for the treatment of high blood pressure.

A few hours before the Wyeth show, some 20,000 liquor retailers and distributors got together in 24 cities to see and hear an all-out pitch via TV from Frankfort Distillers Corp. Frankfort hit the liquor men with big movie and TV names. At the special listening spots in the 24 cities, the company set up lobby displays and handed out prizes.

Two big business shows a day still isn't usual for closed-circuit TV, but it may very well be below par in the next year or two.

• **Operating**—At present, a company

that wants to use the system can turn in one of three directions: toward Box Office Television, Inc., the Tele-Sessions Div. of Theater Network Television, Inc., or Du Mont. All three offer essentially the same service. Box Office and TNT, however, are independent producers that offer package programs by hiring TV lines, talent, technicians, theaters, and equipment for each occasion. Du Mont, on the other hand, calls on the full staff and equipment of its regular network operations.

A few big sponsors have persuaded National Broadcasting Co. and Columbia Broadcasting System to produce private shows for them, but these net-

works are not out beating the bushes for business as Box Office, Du Mont, and TNT are.

This year TNT's Tele-Session Div. has put on big shows for Sealtest, Dodge, and a few others besides the Frankfort job. It's also TNT that has been handling the big boxing matches in theaters around the country.

Box Office TV came into the field in mid-1953. Since then it has done two shows apiece for Ford Motor Co., Chrysler Corp., and Pan American World Airways, plus a half-dozen other shows for top industrial clients.

• **Equipment**—Today, as the map on page 46 shows, there are 88 permanent installations ready for hire by Box Office, TNT, or Du Mont in practically every part of the country. In addition, the Sheraton hotel chain has its own

cities.
se the
cilities
ent at
ne in
try to
later,
cepted
weeks
ns sat
t was
ege of
picked
drum
roduc-

1954

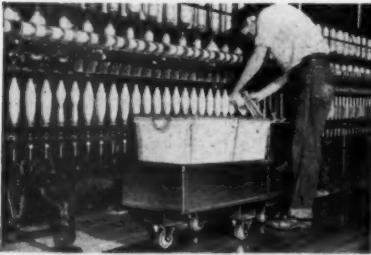
Faultless

CASTER

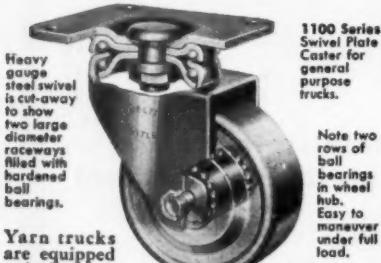
MATERIALS HANDLING

FACTS

Russell Manufacturing Co., Alexander City, Ala.
INCREASES TEXTILE PRODUCTION
and decreases cost



Advanced engineering methods of servicing over 64,000 spindles at the mills of Russell Manufacturing Company have helped them become one of the South's most enterprising textile mills. For example: fast, efficient doffing is accomplished at Russell with tilt-type doff boxes, equipped with Faultless 504-4TG Rigid Plate Casters with 4-in. diameter ball bearing, drawn steel, thread-guard wheels.



Yarn trucks are equipped with two Faultless 1104-4TG Swivel Casters and two 504-4TG Rigid Plate Casters for a highly maneuverable and efficient combination. Russell engineers selected Faultless ball bearing drawn steel wheels because of their double-thick-steel flat tread with smooth edges and absolute concentricity for minimum handling effort and maximum floor protection.

Casters for light, medium, heavy and special duties are included in the extensive Faultless line. Faultless wheels are available for every type floor and load, as well as for special temperature and chemical conditions.



Each month the solution to a real materials handling problem is fully presented in a free, handy size folder. To get the complete story on the Russell Manufacturing Co. caster application mentioned above, write for your copy.

Faultless CASTER CORPORATION, EVANSVILLE 7, IND.
Making Casters for more than 64 years.
Branches in Principal Cities • See phone directory.



IMPACT is one thing big screen closed-circuit TV gives. Here Pres. E. C. Quinn of Chrysler Div. spells out plans for 1955 selling year to some of 3,200 dealers in 28 cities.

permanent facilities set up in hotels in five cities.

Besides these permanent installations, there are a couple of hundred cities and towns where Bell System cables or microwave signals reach. Portable equipment is available to screen a TV show in these places. As yet, it is heavy, and sometimes doesn't give top-quality pictures. That will be changed soon, when General Precision Laboratory, Inc., comes out with a new portable unit considerably lighter than the ton or more present models weigh. Such units will allow quick installations in hotels and other spots that may not be reachable now.

- Costs—One drawback for closed-circuit TV is cost—although those in the business don't agree that it's a real obstacle. They argue that its advantages are worth the price and that it hits the target closer than any other method.

The Wyeth show for the American College of Physicians cost the company about \$50,000—including the cost of invitations. That amounts to about \$5 a head. Compare that with other methods of reaching the medical profession. Wyeth figures it costs about \$4.50 a call when its detail men make personal visits to the doctors. Then there's advertising in professional journals and at meetings to introduce a new drug. Added together, these costs would bring conventional communication means to about the same level of \$5 a head.

But the TV system was faster, the regular meeting of the physicians

isn't until next year, and by the other methods the company probably couldn't count on the undivided attention or the same amount of time from 10,000 doctors.

Take Ford Motor Co.'s second show this year. It reached 35,000 dealers and salesmen in 39 cities. If the cost was about \$10 a head, that would be a \$350,000 tab. But if the company could have assembled all those people in one spot, the cost in time and money would have been just short of astronomical. Even regional meetings cost a good deal, especially if you add in the time spent by the company's top executives.

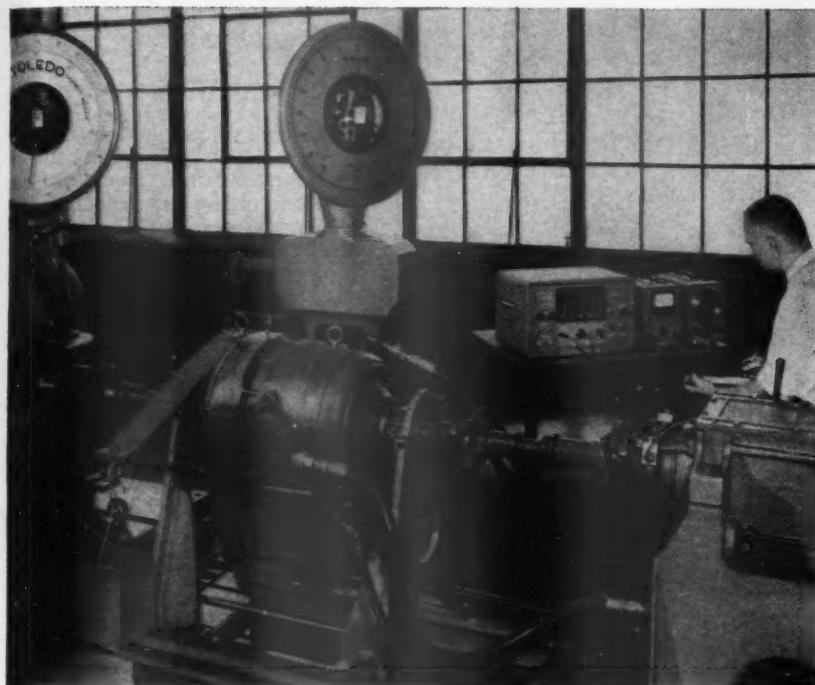
With the TV setup, Ford got to its 35,000 all at one crack, and nobody had to travel more than 100 miles to see the show.

- Priced to Fit—Actually, it's pretty tough to get figures on a show until you are fairly sure what kind of program you want. Last year, for instance, Du Mont rigged up a demonstration for Remington Rand's Univac computers. It was limited to one spot, for 50 viewers. The tab: \$1,000. But an elaborate production with trick sets, big names, and a multi-city network might run as high as \$100,000.

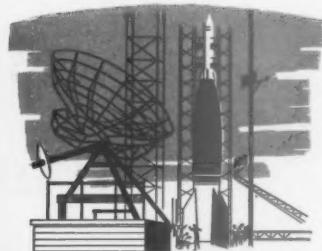
Though some sponsors want to use name talent and lavish sets to drive home their message, most settle for using office sets, a few charts and displays, and company personnel as the cast.

Use of prompters cuts down on the amount of time management people

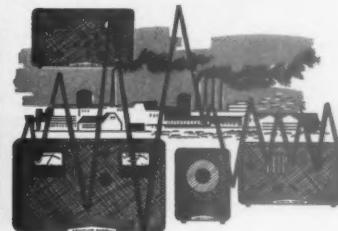
Your business is in the Age of Electronics



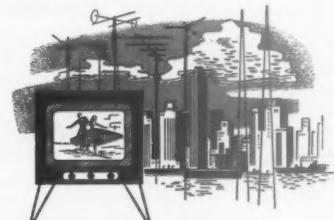
Modern measuring. Twin Disc engineers connect a Hewlett-Packard electronic counter to magnetic pickups. Pickups are actuated by gear teeth on torque converter shafts. Counter shows speed ratio instantly, accurately, in direct-reading digital form. In many counter applications, non-technical personnel make precision measurements without special training.



Radar, sonar and other electronic military achievements were made possible by accurate, dependable electronic test instruments. Now, advanced models of these same instruments are invaluable in rocketry, nuclear physics and research into interstellar phenomena.



Throughout science and industry, electronic test instruments make routine measurements faster, more accurately, increase knowledge by opening the door to measurements once not possible. Electronic test instruments work by measuring or comparing electrical impulses from natural or man-made sources.



Your TV picture is clear and steady, and color TV is now at hand, thanks to electronic test instruments. TV set makers use instruments to design better circuits, speed manufacturing and improve testing. Broadcasters use them to monitor equipment performance and maintain transmitters and microwave networks in perfect operating condition.



**WORLD LEADER IN
ELECTRONIC MEASURING
INSTRUMENTS**

HEWLETT-PACKARD COMPANY

275 PAGE MILL ROAD • PALO ALTO, CALIFORNIA, U. S. A. Cable "HEWPACK"

8155

Field engineers serving all principal cities

the
es.
the
ably
atten-
from
the
cost
be
any
ple
money
strong-
cost
the
ex-

to
body
s to

till
pro-
tion
com-
for
an
sets,
work

use
ive
for
dis-
the
the
ple

954



When you're "stymied" by a shipping problem —Ask our man!

- Shippers have learned the value of calling in Baltimore & Ohio freight representatives, for these men are steeped in the know-how of efficient shipping. They are friendly and always ready to answer your questions.

They've actually been over B&O lines, seen the operations in yards, terminals and offices. They have studied, under departmental officers, the many phases of shipping you will wish to know about.

At their fingertips is information on B&O's Sentinel Service on carload freight, and Time-Saver on less-carload. They're up-to-the-minute on schedules and handling, and they are keeping current on transportation topics of importance.

So, when special problems cause a "stymie", let the B&O man help remove them. He'll be glad to do it, and his cheerful advice may save you money and needless uncertainty.



Baltimore & Ohio Railroad

Constantly doing things—better!

"... the cost to Chrysler:
\$110,000 including lunch for
3,200 dealers . . ."

STORY starts on p. 46

have to spend rehearsing for their show. Six hours is generally plenty for a one-hour presentation. Some use has been made of two-way radio to allow for discussion periods.

For standard stage sets and with the company providing the program, Du Mont offers a rough rule of thumb that works this way:

Figure \$1,000 per city for a minimum of 10 cities, east of Omaha. Add something over \$200 per city for the "loop" connecting the phone company with the outlet. If it's a big theater, figure another \$1,000 to \$1,500 per house. A theater owner may hold out for a fatter rental fee if he is showing a big-drawing picture or if the telecast is slated for a weekend night—he has to make up his lost ticket revenues.

Even so, this Du Mont measuring stick gives you only a rough approximation of the total.

- **Drama**—But cost isn't everything, of course. TV is dramatic. It puts a product right in front of the men a company is aiming at. It lets a company's personnel see the top people in an intimate way—the way a moving picture gets the personality on the screen across to each individual in the audience.

Chrysler makes this point: No two people hold a meeting or say things in exactly the same way. Even if you have the same group journeying around holding meetings, they won't always feel the same, won't always be keyed up to the right pitch. TV dodges that drawback.

- **Results**—In Chrysler Div.'s Aug. 28 show, in which it reached 3,200 dealers in 28 cities, it wanted uniformity in presenting throughout the division a three-point message: (1) to get dealers to share the cost of the new TV show—more than 90% of them did; (2) to tell the dealers where the division proposes to go in 1955, and to get their opinion—most of them let Chrysler know they agreed with the objectives; and (3) to get the dealers to take a look at their own businesses and put them in shipshape order for the new selling effort.

Chrysler officials checked up on the results of the show through an outside survey team as soon as it was over. They found results were good—probably better than a live meeting.

But a top officer of Chrysler emphasizes that such a program is expensive. The cost to Chrysler: \$110,000 including lunch for the 3,200 dealers.

145 Expert Consultants on Workers' Uniforms at Your Service...FREE!

MEMBERS of the Institute of Industrial Launderers are uniquely qualified to assist you in developing the right uniform for any job. We have cooperated with the National Safety Council on safety programs in industry. We have worked with the U. S. Testing Company in the study of scores of technical points, such as shrinkage, color retention and tensile strength loss. We have had a hand in the development of standards of performance for work garments, in cooperation with the American Standards Association.

Our consultant service is free. You will put yourself under no obligation in using it before making any decision on work uniforms. You will pay nothing extra for its continuing benefits should you decide to rent from an Institute member.

Institute members have nothing to sell...but everything to rent. Not just uniforms...but everything from woven cotton shop towels to specialized protective garments. Members also can provide advice and service for fire retardant or acidproof safety clothing.

All the experience, all the facts, all the know-how Institute members have acquired through the years, is completely at your disposal free of charge. Expert Institute consultants can help you develop uniforms or special garments that will be safer, more efficient, more economical. They can furnish you with any emblem, special design or color that you might want. Should you use a safety slogan? Would certain colors be safer for certain jobs? Do you need special-purpose work clothes that are fire-retardant or acid-proofed? 145 Institute members from coast to coast have the answers to these and scores of other questions on work uniforms...answers based on actual experience in providing a uniform rental service for hundreds of different jobs.

More than 150,000 plants from coast to coast have found it pays to use our rental service. You carry no inventory. You have no cleaning, repairing or replacement expenses. You get the right uniform for every job...and it costs you far less than if you bought them yourself.

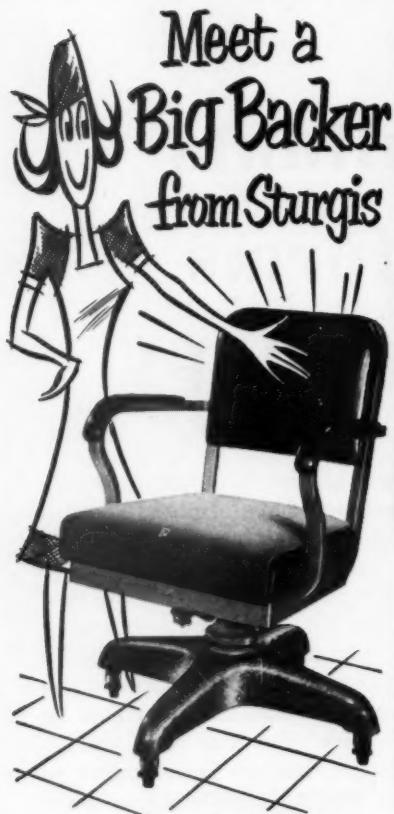


**Facts are free...mistakes
are costly! Write today
for expert advice!**

INSTITUTE OF INDUSTRIAL LAUNDERERS

1627 K STREET, NORTHWEST, WASHINGTON 6, D. C.

Active Members: American Standards Association, National Safety Council



Meet a Big Backer from Sturgis

If you're a man who likes a generously-sized backrest to support you in solid comfort through the day, this new Sturgis 1400-G chair is your dish. That backrest, sir, is a cool $16\frac{1}{2} \times 13\frac{1}{4}$ inches of cushioned comfort. Put your back into it, swivel, tilt—and learn what relaxing is!

Wonderfully buoyant full cushioned coil spring seat too. And under it all is the famous fiber glass base that *never* gets unsightly, *never* needs to be refinished. How about asking your Sturgis dealer for a demonstration of this surprisingly moderately priced chair?



POSTURE CHAIRS

Manufactured in Sturgis, Mich. and Charleston, S. C.
The Sturgis Posture Chair Company, Sturgis, Michigan

THE STURGIS POSTURE CHAIR COMPANY

General Sales Offices, 154 E. Erie St., Chicago 11, Illinois

We'd like a copy of your illustrated folder describing this and other chairs.

Name _____

Firm Name _____

Address _____

City _____ State _____



Gets New Command

Gen. Walter Bedell Smith joins the ranks of military brass hats retiring into industry (BW—Aug. 9 '52, p30). He was elected this week vice-chairman of American Machine & Foundry Co.'s board of directors. Morehead Patterson, AM&F's chairman and president, said Gen. Smith's role will include policymaking.

Awning Maker Pays \$1 To Each Plant Visitor

A small manufacturing company in Pittsburgh is paying the public to walk through its plant. Koolvent Aluminum Awning Co. has come up with an institutional advertising gimmick that is paying off.

About two months ago, Koolvent ran an ad in a Pittsburgh paper offering to pay organizations \$1 for each member who toured the plant. No fewer than 10, no more than 25 would be taken through at a time. The organization could use the money it received in any way it saw fit.

Two days later, Koolvent found itself booked solid for tours for the next two months. Now it's booked throughout the winter.

Each sightseeing group is shown Koolvent's operations from the time the aluminum enters the plant, through its cleaning, coating, painting, and cooling processes until the custom-made awning is finished.

No selling is done, no names are taken for future leads.

So far, the company has given away approximately \$2,000. "And it has definitely increased our sales," an official said. "For example, customers call in and say that, so and so in a group that

toured our plants recommended them to us. And there's a sale." So Koolvent plans to continue the tours indefinitely.

MANAGEMENT BRIEFS

Frederick W. Richmond, heading up a New York investment group, has apparently lost a round in his attempts to buy out heavy machinery companies. Stockholders of Hydraulic Press Mfg. Co., Mt. Gilead, Ohio, last week voted against selling the company to Richmond.

E. I. du Pont de Nemours & Co., with a medical department of 130 full-time and 36 part-time doctors, has compiled a book explaining how a company medical program can be set up. The book, *Modern Occupational Medicine* (Lea & Febiger, Philadelphia) was written by 20 of du Pont's staff doctors.

Detroit railroad executives have set up a Railroad Community Committee to try to improve relations with the public. Detroit is the 16th city to form such a group since the idea was introduced a year ago at the Eastern Railroad Presidents' Conference. Executives in Detroit will attend community relations and public speaking courses at Wayne University.

MIT is offering a five-year management course for the shipping and shipbuilding industry. The course will lead to a new degree, Master of Science in Shipping and Shipbuilding Management.

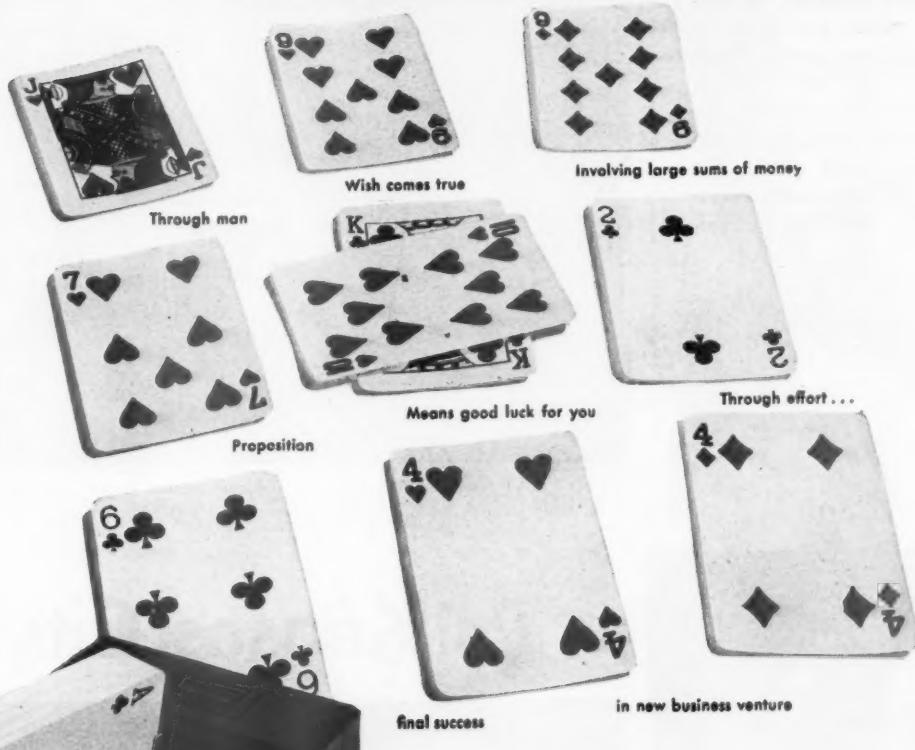
Howard D. Johnson Co., operators of the orange-roofed highway restaurant chain, got set this week to spread rapidly into the motel business. For the past six months, a Savannah, Ga., tourist court has been serving as test ground for the new venture. Its success was good enough to jell plans for other motels on the East Coast and in the Midwest.

Bell Aircraft Corp. has reshuffled its top management. Lawrence D. Bell, president and general manager since 1935, will drop his general manager's duties. They were handed to Leston P. Faneuf, who was promoted from assistant general manager and secretary and treasurer.

ACF-Brill Motors Co. has developed its plan to spin off its Hall-Scott Motor Div. on the West Coast. Stockholder approval now will be sought Oct. 20. The plan would create a separate corporation, Hall-Scott Motors Co., with its common stock and debentures distributed among ACF-Brill stockholders.

Your Future Looks Good in ACETATE

**The long-playing history of Kem Cards
can predict many other successful
applications for Celanese* Acetate Sheeting**



Since Kem Cards are pure Celanese acetate, they tell a fast factual story about this plastic sheeting.

"The finest cards you can deal" are durable—they last for years free of creases, chips, or cracks. Kem Cards can be washed or wiped clean with a damp cloth again and again. Their beautiful printed colors are non-fading. They always feel satin-smooth and crisp.

Manufacturers are translating these facts into finer lampshades, tougher safety shields, eyeglass frames, transparent containers, wallet enclosures, visible records. Made of Celanese sheeting, these products reflect quality. They are easy to fabricate, priced right in every category—with a predictable future of success. Ask your local Celanese representative for the details. Or write:

Celanese Corporation of America,
Plastics Division, Dept. 129-3
290 Ferry Street, Newark 5, N. J.
Canadian affiliate, Canadian
Chemical Company, Ltd.,
Montreal and Toronto.

Celanese
PLASTICS

**EXECUTIVE
GIFT**
A pair of Kem decks in
black plastic case makes
a gift fit for a president.
\$7.50 a set at better shops.

*Reg. U. S. Pat. Off.

them
solvent
nately.

up a
is ap-
cts to
anies.
Mfg.
voted
Rich-

with
-time
piled
pany
The
edicine
written
ers.

set up
ree to
public.
such a
ed a
President
De-
tions
ayne

ment
uild-
d to
e in
age-

of
rant
read
For
Ga.,
test
cess
ther
the

top
resi-
1935,
ties.
neuf,
gen-
ner.

its
otor
der
20.
cor-
with
dis-
ers.

POLITICS

Politicians of both parties, fighting for control of Congress in next month's elections, are debating two issues: the recession, and unhappiness among farmers. These issues hold the key, many feel, to political success in 1954. Here are closeups of two areas where these issues are white-hot—the areas around Kansas City, Mo., and South Bend, Ind.



DEMOCRAT George Christopher, an old-time farmer, hopes to go to Congress. Like many farmers, he is unhappy over drought and Secy. Benson.



BOSS James Aylward heads the Democratic organization, backs Christopher.

Kansas City: This



CHRISTOPHER knows how to talk to farmers in their own language, gain their trust and loyalty. He relies almost solely on handshakes, casual chats.



REPUBLICAN Jeffrey Hillelson (right), not a farmer, must fight hard against Christopher. Here House Speaker Joe Martin is talking in Hillelson's district.

The Issue Is Farm Policy



HILLELSON must rely more on sound trucks and lapel buttons for his campaign.

Two white-hot issues will keep politicians jumping between now and next month's elections. One issue is the sag that developed in the U.S. economy last year, and unemployment and uncertainty that came with it. The other issue is unhappiness among farmers.

These are full-blown national issues. But, like many national issues, their roots are down at the local level. It's at this level that politicians lay the foundations of campaigns. And it's at this level, down among the roots, that you can often find out most easily what the issues are made of, what they mean to the voters and the vote-seekers.

This week, *BUSINESS WEEK* sent a reporter to two localities where the issues of recession and agriculture stand out starkly above all others. In the area of South Bend, Ind., the key subject is recession (page 62). In the area of Kansas City, Mo., where these pictures were taken, the subject occupying most of a politician's waking thoughts is agriculture.

The Fourth Congressional District of

ALL-TIME Highlights of Sport

FEATHERED
ROCKET!



The only game bird that breeds in every one of the United States, the rocket-fast and elusive Mourning Dove can change his direction at lightning speed. He's an olive-hued beauty who cruises at 45 miles an hour, can streak to over a mile a minute in just a few whistling beats of his wings. A challenge to every field hunter's skill, he gets top billing on any list as the sportsman's most demanding target.

A stand-out in another field is . . . Atlantic Bond: 12 of America's top railroads, 7 of the 8 largest book publishers and 12 of the country's leading carpet mills specify clean, clear, *Atlantic Bond* paper for better looking business forms or letterheads. Join the leaders: specify *Atlantic Bond* on your next order.

MADE BY EASTERN CORPORATION, BANGOR, ME.

Atlantic Bond
Paper for
Business

See the beautifully illustrated Record Sheet of "America's Favorite Upland Game Birds". Ask your printer or write on your letterhead to Eastern Corp., Bangor, Maine.

How to pick your next home town—quickly and easily—from 2300 communities

Check this list
of Plant Location
Factors
to get the
combination
you need...

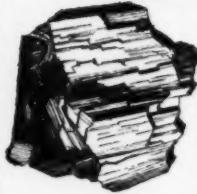


ACCESS TO MARKETS

Is nearness to markets important?

IMPORTANT

The AGE System runs through the heart of industrial America—serving important manufacturing and population centers in Michigan, Indiana, Ohio, Kentucky, West Virginia, Virginia, Tennessee.



MINERALS

Are certain minerals important?

IMPORTANT

AGE offers an abundance of more than 20 important minerals, including:

<input type="checkbox"/> COAL	<input type="checkbox"/> IRON
<input type="checkbox"/> SALT	<input type="checkbox"/> OIL
<input type="checkbox"/> SAND	<input type="checkbox"/> ZINC
<input type="checkbox"/> LEAD	<input type="checkbox"/> GAS
<input type="checkbox"/> MANGANESE	



RECREATION

Are recreational facilities an important consideration?

IMPORTANT

The AGE territory offers excellent recreational facilities—good camping, proximity to National Parks, lakes and rivers, good fishing and hunting, modern highways, historical spots, high hills and deep valleys.



WATER

Is water for processing important?

IMPORTANT

AGE territory offers 18 rivers and abundant ground water for processing.



POWER

Is power important to your operation?

IMPORTANT

AGE is one of the largest, most modern private power systems in the world. It offers unlimited power, day and night, for any type of industrial operation.



LIVING CONDITIONS

Are living conditions important?

IMPORTANT

AGE territory offers you 2300 communities, adequate housing, a wide range of living conditions to choose from.



FORESTRY

Are woods and other forest products important?

IMPORTANT

There are thousands of square miles of forest in AGE territory including pulp woods and soft and hard woods for many uses.



LABOR

Do you need a specific type of labor?

IMPORTANT

AGE territory includes a huge pool of the finest types of labor, both male and female:

<input type="checkbox"/> TECHNICAL	<input type="checkbox"/> SKILLED
<input type="checkbox"/> MECHANICAL	<input type="checkbox"/> UNSKILLED

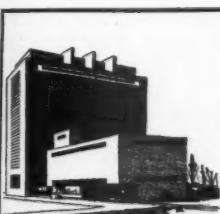
If you are looking for a plant location...

... the type of community you choose will have an important bearing on the future of your new plant. The information on these pages can help you locate that community.

Just take a few minutes now and check off among these 14 most important plant-site factors the ones which apply to your operation. Then accept Mr. Davis's invitation. He will set up a conference with you to discuss those of our 2300

communities that offer the best combinations of the specific advantages you seek.

American Gas and Electric plant-location engineers can carry your problem from there. The experience they've gained in day-to-day specialization in plant-location work has helped many companies to find new homes . . . and without involving their own personnel until all preliminary details have been completed.



DISTRIBUTION FACILITIES

Are distribution facilities important?

IMPORTANT

Excellent storage and warehouse facilities and other efficient aids to the movement and transfer of goods are available in AGE territory.

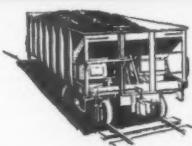


REASONABLE TAX RATES

Is a favorable tax structure important?

IMPORTANT

AGE territory offers a choice of favorable tax structures. Your special requirements will be carefully analyzed.



FUEL

Is fuel important to your operation?

IMPORTANT

Approximately 50% of the bituminous coal produced in the U. S. is mined along the AGE System. AGE territory also has many natural gas areas, and important oil and gas pipelines to tap from.



TRANSPORTATION

Is economical access to sources of raw materials and large markets an advantage to you?

IMPORTANT

AGE offers a unique balance between raw materials and markets. It also offers 18 main line railroads, rivers, thousands of miles of modern highways, and leading airline facilities—assuring you the most advantageous position on transportation rates and delivered cost of your products.

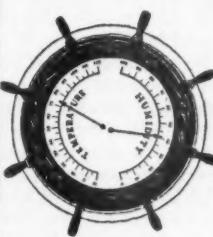


ACCESS TO SEAPORTS AND LAKEPORTS

Is access to major seaports or lakeports an advantage to you?

IMPORTANT

AGE can offer you easy access to 4 major Atlantic seaports and ports on 2 Great Lakes.



CLIMATE

Are climatic conditions a factor in your business?

IMPORTANT

The seven-state area served by the AGE System—stretching from Lake Michigan to the North Carolina border—offers a wide range of climatic conditions from which to choose the one that meets your requirements.

For that just right plant site—Look to the American Gas and Electric area of industrial opportunity

OPERATING SUBSIDIARIES

APPALACHIAN ELECTRIC POWER COMPANY

INDIANA & MICHIGAN ELECTRIC COMPANY

KENTUCKY POWER COMPANY

KINGSPORT UTILITIES, INC.

OHIO POWER COMPANY

WHEELING ELECTRIC COMPANY

MEMO

FROM THE MANAGER
OF AREA DEVELOPMENT DIVISION
AMERICAN GAS AND ELECTRIC COMPANY
30 CHURCH ST., NEW YORK 8, N.Y.
TEL. CORTLANDT 7-5920

To Executives of Expanding Industries:

If you will write, or call me, I'll be glad to arrange confidential conferences with executives familiar with the resources of our territory. They are experienced in briefing plant locations according to the needs of individual industries. There will be no obligation. All we have to sell is power, enough to meet the needs of all industries now located or that may want to locate on our lines because of the economic advantages the AGE area offers.

Sincerely yours,

Lee L. Davis



... in coils

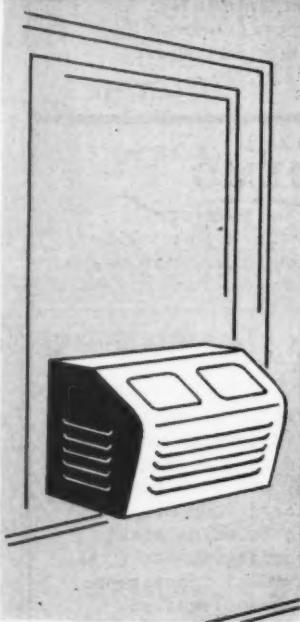


... in straight
lengths (PLAIN or FINNED)



... in extruded
shapes

Tubemanship AND ALUMINUM



Another product of Tubemanship—Wolverine aluminum tube—helps defeat corrosion and reduce structural weight in your product.

In heat exchanger and processing operations—in refrigeration, ventilating and air conditioning—manufacturers know they can depend on Wolverine aluminum tube for maximum performance and service. That's because every foot of it is backed by constant research, rigid quality control and the highest of engineering skill—*Tubemanship in action!*

Tubing, however, is not the only aluminum product manufactured by Wolverine. If your requirements call for extruded shapes you'll find Wolverine can be counted on there too. You'll find, too, the same careful attention to details that has made Wolverine a leader for more than 37 years. For more information write for the Wolverine Statement of Scope. **WOLVERINE TUBE, Division of Calumet & Hecla, Inc., 1501 Central Avenue, Detroit 9, Michigan. Plants in Detroit, Michigan, and Decatur, Alabama.**



WOLVERINE TUBE

DIVISION OF CALUMET & HECLA, INC.

Manufacturers of Quality-Controlled Tubing
and Extruded Aluminum Shapes

PRODUCERS OF TUBING AND TUBULAR PRODUCTS OF COPPER,
COPPER-BASE ALLOY, ALUMINUM AND ELECTRIC-WELDED STEEL

"... the hope of both parties is to gain the confidence, loyalty, and votes of farmers . . ."

KANSAS CITY starts on p. 54

Missouri consists of seven counties and part of an eighth. The seven are rural; their main business is raising cattle and grain. The other is Jackson County. The part of it in the Fourth District includes four suburban wards in southeast Kansas City, and the town of Independence, home of former Pres. Truman. Some 52% of the district's vote is in Jackson County.

Like many other areas formerly considered Democratic strongholds, the Fourth District went Republican in 1952. It voted for Pres. Eisenhower, and it also sent a Republican to the House of Representatives. But the joy of Republicans in the district was not unalloyed. The Fourth voted only 53% for the GOP. That's a precarious enough toehold to twang the nerves of many a GOP strategist in the district—and to offer bright new hope for many a Democrat.

The hope of both parties in the district is to gain the confidence, loyalty, and votes of farmers. Farmers, and people whose lives and businesses are closely connected with farming, make up the major voting block of the district. These people are not happy. Farms have been plagued by drought and searing heat, and—politically more important—by low prices, which some farmers and most Democrats blame on the policies of Agriculture Secy. Ezra T. Benson.

• The Choice—Amid this atmosphere of discontent, two men are battling for the privilege of representing the Fourth District's farmers in Congress. The two are Republican Rep. Jeffrey Hillelson and Democrat George Christopher.

Hillelson was elected to his Congressional seat in 1952. Riding the Eisenhower tide, he carried all eight counties—including Truman's home precinct. He is a congressman of the type that has won many votes in the post-war decade; a war veteran in his middle 30s, clean-cut in appearance, intense, and serious. He speaks well, but is short on emotional appeal.

Hillelson boasts that his Congressional voting record shows 88% support of Pres. Eisenhower. This may persuade some Democrats in his district who voted for Eisenhower two years ago to vote for Hillelson again this year. Hillelson has a loyal following among local Young Republicans, but his voting record has alienated labor, postal workers, and many farmers. Still other farmers have been alienated not by Hillelson

both
con-
votes

p. 54

es and
rural;
cattle
county.
District
south-
of In-
Pres.
district's

y con-
, the
an in
hower,
to the
at the
ct was
l only
arious
ves of
istrict-
many

the dis-
loyalty,
, and
es are
make
the dis-
happy.
ought
more
some
one on
Ezra

phere
ng for
outh
the two
elson
er.

Con-
the
eight
the pre-
the type
post-
middle
tense,
ut is

ingres-
sor
per-
district
years
year.
among
oting
work-
farm-
elson

, 1954

talk about duplication...



...now you can **RENT** the world's foremost duplicating system for as low as **7.50** a month

... rent one, a dozen or more OLD TOWN Inkless Duplicators. Install a complete, modern duplicating system — with no capital investment.

• **30-DAY FREE TRIAL** . . . in your own office, prove for yourself how an OLD TOWN duplicator cuts paper work. You'll discover dozens of time-saving, money-saving uses — from sales letters, bulletins and reports to simplified billing and control systems.

• **TRADE IN YOUR OLD MACHINE** . . . that old-fashioned "smudge pot" is worth money — trade it in on the new OLD TOWN Duplicator.

And this is OLD TOWN's modern masterpiece of precision engineering . . . the most advanced, versatile and accurate Duplicating Machine ever made. Makes all the copies you need of everything you can type, write or draw in 1 to 6 colors.



World's foremost maker of carbons, ribbons, duplicators and supplies

get the details
on this deal —
mail the coupon now!

Old Town Corporation, Dept. BW-10
345 Madison Avenue, New York 17, N.Y.

Please send me information on the OLD TOWN Inkless Duplicator, including 30-day free trial, rental and trade-in. Present duplicator is

You may arrange a **FREE** Trial

Company Name

Attention

Address

City..... Zone..... State.....

What's New In MATERIALS HANDLING

by TOMMY TRUCKER

Trailer Operation by Overhead and Underfloor Conveyor Systems is today's big news in the Materials Handling field. Both types have proved to be the most economical and efficient method for fast, accurate organization of shipments in many large concerns—including the warehouses of Nationwide grocery chains and leading Eastern and Midwest freight terminals.



Although 4-wheel trucks are most generally used, a leading Eastern freight terminal has found that

THOMAS "Job-Suited" 3-wheel trucks, equipped with Overhead Conveyor Attachments, save a great number of manhours and a great deal of manpower in the handling of barrels, drums and similar heavy, bulky freight.

Other users have found the new THOMAS "Dual-Purpose" Truck, equipped with a Coupling Pin for use with an Underfloor Conveyor and a Manual Coupler for tractor-trailer train operation, to be their most economical investment for fast efficient handling—especially at the discharge end of the Conveyor System. Since this combination permits several loaded trailers to be taken off the Conveyor and moved to their destination by power.

Then, too, all THOMAS Trucks and Trailers can be "Job-Suited" to meet your exact requirements. This exclusive THOMAS plan permits you to select the correct size and type of chassis to "carry" your load, and have it equipped with the proper superstructure to "hold" your loads... to provide you with "Job-Suited" equipment that will give you more efficient loading and safer handling at less cost.

There is a THOMAS Representative in every Trade Area. Write, wire or phone for literature describing the complete THOMAS line of Trailers, Trucks, Casters, Wheels and "JAK-TUNG" One-Handling Systems.



THOMAS

THOMAS TRUCK & CASTER CO.
539 Mississippi River • Keokuk, Iowa

". . . he must beat the effects of the drought, which was not his doing . . ."

KANSAS CITY starts on p. 54

himself, but by the team he represents.

Hillelson's Democratic opponent, George Christopher, is another kind of man altogether. He is 65, the father of nine children. For 21 years, he was a tenant farmer; finally he managed to save enough money for a down payment on a farm of his own. He talks the language of farmers; he understands them, and they listen to him because he is one of them. He went to Congress in 1948.

Christopher's campaign methods are unlike Hillelson's. Hillelson makes use of a sound truck, lapel buttons, match folders, and the like. Christopher relies almost solely on handshakes and words. A typical Christopher remark goes like this: "We've been plagued by one year of flood, three years of drought, and two years of Benson."

• **In the City**—Christopher's strategy is to work on the farmers and leave Jackson County to the Kansas City Democratic organization.

This organization is powerful. It is made up of a coalition of Democratic factions that, in the August primary elections, joined with CIO and routed what was left of the old Tom Pendergast machine. The machine, taken over by Jim Pendergast (Tom's nephew) in the late 1930s, is now stripped of all patronage and is almost negligible as a political force.

The coalition is headed by James Aylward, Sr. (picture, page 54), a man who looks like the popular conception of a political boss and who speaks candidly of machine operations. He and his men will try to swing the four Kansas City wards of the Fourth District for Christopher. They hope Jim Pendergast will help; despite his defeat at the primary, Aylward doubts that he will put his animosity toward the coalition before his loyalty to the Democratic Party. There is so great a gulf between Republicans and Democrats in Kansas City, Aylward says, that Pendergast would have nowhere to go even if he did decide to bolt his party.

• **The GOP**—Republicans don't have nearly so effective a political organization in Kansas City as their opponents. Hillelson is relying heavily on the Young Republicans to help him back into his Congressional seat.

But cynical Democrats are fond of saying that the GOP has the most powerful machine of all in Kansas City—the Kansas City Star. This paper, Democrats charge, is used as a political weapon in favor of Republicans.

Republicans may have another advantage in their superior ability to collect campaign money. Kansas City GOP workers say that really big contributions on the \$1,000 level are few and far between, but \$100 to \$300 donations are coming in apace. Much of the money for the Republican effort will come from a big \$100-a-plate dinner; Citizens for Eisenhower will collect more contributions through small luncheons.

Christopher, on the other hand, needs little money, since his campaign methods are comparatively inexpensive. He claims that he financed his entire fight for the primary election on \$600. He depended on the faithful to arrange picnics, barbecues, and fish fries. These pulled in crowds for his speeches. He is following the same pattern now, with a slight financial assist from national Democratic headquarters and an even slighter one from the coalition in Kansas City.

• **Labor**—Both CIO's Political Action Committee and AFL's Labor League for Political Education are giving Christopher solid backing. The two groups figure on an 85% registration of their membership, and they hope they'll influence a big majority of the registrants to vote Democratic.

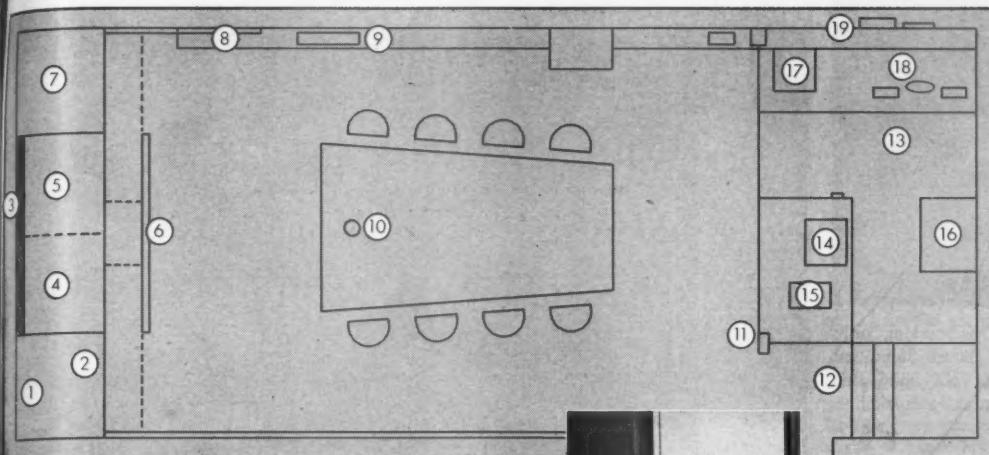
Hillelson has called Christopher a "CIO stooge," and has charged that he "came up to Kansas City and knelt down before labor and Pendergast." Christopher and labor leaders maintain, on the other hand, that labor is on Christopher's side merely because it likes his voting record.

• **Chances**—Impartial observers in the Fourth District figure that Hillelson will have an uphill fight against Christopher. To win, he must beat the effects of the drought, which was not his doing but which has added to the general feeling of dissatisfaction among farmers. He must also beat Secy. Benson's flexible price support policies, which many farmers regard as the main cause of their woes. And in Jackson County, he must beat the apathy of Republicans who for years have lived in a city controlled by a Democratic machine.

Since the Fourth District is held only precariously by the GOP, national Republican strategists will give Hillelson a good deal of help. Speaker of the House Joseph Martin, for instance, visited the district not long ago and spoke at a rally for Republican workers.

But many observers feel that even such help as this may not be enough for Hillelson. His opponent is a farmer.

• **Recession**—In other political districts throughout the U.S., agriculture is not so important as in Missouri's Fourth. For a closeup of an area where the white-hot issue is recession, turn to page 62.



NINE ROOMS in ONE

Eastman Kodak's conference studio is a model of audio-visual efficiency



There's a room in the building at 343 State Street, in Rochester, N. Y., where a man, by reaching for a few controls, can switch lights on and off, turn on black-and-white or color television (and rotate a roof-top antenna for best reception), lower a screen and operate a remote sound movie projector, start a radio and record player, record or play back magnetic tapes and, if necessary, put on the air conditioning.

What's more, any combination and sequence of these facilities can be set up in advance on a master "patch panel" so that a Kodak business conference can see and hear a complete, custom-made program with the precise staging of a Broadway drama.

This is what Eastman Kodak's advertising executives call their "Demonstration-Conference Room," a visit to which is like an excursion into 21st century business.

The purpose of the room is simple enough. In its normal advertising administration, Kodak holds dozens of conferences, previews films by the mile, reviews current techniques in radio and television, looks at slide-film presentations, records sales messages and branch-office communications on tape, tests

many of its own future products and methods on its own executive staff.

These meetings once were held in a variety of rooms around the building—location usually depending on the facilities at hand in any one spot. Since July of this year, practically all such conferences occur in the new room—a tremendous advance in convenience, comfort and the saving of executive time.

The explanation accompanying the diagram above indicates how admirably Sight, Sound and Electronics have been wedded here for business efficiency.

Why do we at Stromberg-Carlson publish this? Because much of the equipment involved is ours. We helped in designing the room and we made and installed the audio and video part. This was a "special" job—but it's typical of our ability to combine electronics and mechanics for any problem of communication. No matter what *your* needs may be—from a simple intercom telephone to a complete factory-wide installation—we're sure we have the answers. Why not ask a representative to call? Just write to . . .

Stromberg-Carlson®

SOUND EQUIPMENT DIVISION

1202 Clifford Ave., Rochester 21, N. Y.

Explanation of the chart

1. Stromberg-Carlson "Custom 400" high fidelity radio and record player. All sound—whether from TV, film, tape recorder or radio and records—may be put through this system.

2. Patch panel. Makes possible a great variety of audio-visual combinations—high-quality 16mm, sound film, silent film with record music, tape-recorded talks with projected slides, etc.

3. Movie projection screen, 5 x 5 feet.

4. Stromberg-Carlson color TV receiver.

5. Stromberg-Carlson black-and-white "Panoramic Vision" TV receiver.

6. Pull-down screen for slide projection.

7. Storage shelves. The doors are covered with cork, to be used as bulletin boards during conferences.

8. Slotted sills for display of photographs, charts and the like.

9. Portable remote control box. Turns lights on and off, starts and stops all mechanical equipment; does everything but answer phones.

10. Retractile microphone over triangular conference table. For conference recording or program recording on tape.

11. Pull-down illuminated panel for viewing colored transparencies.

12. Stepped entrance to soundproof booth.

13. Main projection booth, equipped with duplicate controls for all operations.

14. Kodak "Pageant" 16mm. silent-and-sound movie projector.

15. Kodak Master model slide projector and Kodaslide film strip projector.

16. Magnecord complete tape recording and playback equipment.

17. File for slides, films, etc.

18. Editing and splicing table.

19. Stromberg-Carlson dial telephones. Note—during conferences a flashing light signals to a secretary that the phone is "ringing" though silent!

er ad-
to col-
s City
ing con-
are few
300 do-
much of
effort
te din-
collect
small

hand,
mpaign
ensive.
entire
\$600.
to ar-
h fries.
eeches.
n now,
om na-
and an
ction in

Action
League
giving
the two
ction of
they'll
regis-

ther a
hat he
knelt
rgast."

in the
ellelson
Christ-
t the
is not
to the
among
Ben-
olicies,
main
ackson
ly of
lived
democratic

held
tional
ellelson
of the
stance,
o and
workers.
even
ough
rner.
stricts
is not
porth.
e the
to

1954



STUDEBAKER PLANT is working only one shift. Thousands in South Bend are out of work. Democrats will build this solidly into their November campaign.



DEMOCRATIC candidate for Congress is John Brademas (right), young Rhodes scholar. Politician Paul Butler (foreground) staked his career on Brademas.



ELKHART COUNTY in South Bend's district, provides a rural touch. Charles Ainlay (left), GOP leader, even has support of labor leader Dave Harms.



FARM BUREAU representative explains why he feels Democrats will find the going rough in Elkhart: Indiana farmers are rooted deep in Republicanism.



POULTRY FARMERS are having trouble with falling prices. Democrats, strong in industrial St. Joseph County, may use this as a weapon in rural Elkhart.

South Bend: The



REPUBLICAN incumbent is Shepard Crumpacker, slow-moving, unexcitable.



GOP BOSS Tom Bath hand-picked Crumpacker in 1950, backs him now.

Issue Is Recession



LABOR leaders such as Stanley Ladd, president of the St. Joseph County CIO Council, will help Democrats push their lead in the industrial parts of the district.

The Third Congressional District of Indiana includes four counties. The most populous of the four is St. Joseph; it contains the city of South Bend, Notre Dame University, most of the district's manufacturing, and most of its Democrats. The other three counties are more rural—but not much more. The district is 70% urban.

Unlike the Fourth District of Missouri (page 54), the Indiana Third builds its political feelings largely on the past, present, and predicted state of industrial production. Around South Bend, the 1953-54 business recession is the hottest political issue of them all. • **Jobs**—Manufacturing activity in the district is down 37% from its level a year ago. Unemployment is up sharply in St. Joseph County and in the next most heavily industrialized county, La Porte.

The key company in the district is Studebaker-Packard Corp. A local saying alleges that "as Studebaker goes, so goes South Bend." When Studebaker has trouble, South Bend has trouble, too. And right now, South Bend is having trouble. Studebaker's South Bend employment was 23,000 a year ago; now it's less than half that—10,000.

Studebaker's merger with Packard Motor Co. in June (BW-Jun.26'54, p28) has let the South Bend plant

plant-location news

What transportation facts do you need?

Recently, a container manufacturer using our Industrial Location Service to help select the right spot for his new plant, sent in this request: "We've got to be located where we can supply all areas of our market within 36 hours at a cost that will let us compete for new business." As in many other businesses, the transportation costs and schedules involved could make or break his proposed operation. But ILS found the perfect location—fast.

Here are some of the reasons why. ILS is the one organization that can give complete, up-to-the-minute facts on transportation costs, schedules, and facilities. Whether your business calls for assembling heavy or bulky water-borne materials, or for the use of air transport to get there "fastest with the modest," ILS can give you all the facts—secured firsthand from dozens of carriers.

We even maintain a Washington office to help in transportation problems. From this listening post we get current reports on tariffs, regulations, and schedules... and all of this information is included in our free transportation reports. To get one of these studies for your needs, all you do is contact ILS.

We fill in the picture, too

But this isn't the only type of transportation data ILS supplies. For one specialty-goods manufacturer we did all this: located sites with suitable warehouses for ceramic bodies, and within a short distance of LCL terminals. Even more important, we found him available sites with private railroad sidings.

For every suggested location, ILS also prepared rates for assembling materials and distributing finished goods to given points. Supplied comparative rates for air, rail, water, and highway, too.

By the way, the manufacturer received all these facts for a number of sites in less than ten days. Helped him pick just the right spot without delay.

Other free plant-site services

Transportation won't be your only concern when you're looking for a new plant location. But no matter what factors are involved, ILS can be of help. Reports are available on buildings and sites, markets, raw materials, labor, water and local laws and regulations—to mention just a few. These surveys are tailored to meet your requirements, and sent to you without cost or obligation in strictest confidence.

Our booklet called "Industrial Location Services" shows how you can put this valuable plant-location data to work. To get your free copy, just drop me a card, care of the New York State Department of Commerce, Room 702, 112 State Street, Albany 7, N. Y.

Director, Industrial Location Service

earn

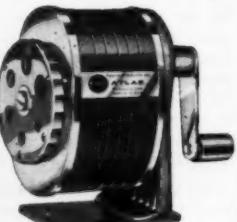
...the respect of your personnel. Place an adequate number of ApSCO Pencil Sharpeners at proper locations for their convenience.

Only ApSCO produces pencil sharpeners engineered for specific office, factory, and school applications.

Specify, too, ApSCO Staplers and Punches when ordering from your stationer.

Descriptive literature available on request.

ApSCO



ALL STEEL APSCO ATLAS

ApSCO products inc.

P. O. BOX 840, BEVERLY HILLS, CALIF.
FACTORIES: ROCKFORD, ILL.; TORONTO, CANADA



**These 2 hands can't be replaced
Give them the best protection . . .**

JOMAC WORK GLOVES

Your workers' hands are your best tool—deserve the best protection. And JOMAC Gloves, with the twisted loop construction, provide it. Thousands of springy loops in each glove cushion the hands against rough surfaces, sharp edges, and bruising shocks—prevent injuries that mean lost time and money. Send for our catalog. Ask about a trial order. **JOMAC INC.**, (formerly **C. Walker Jones Co.**) Dept. A, Phila. 38, Pa. Plants in Philadelphia, Pa. and Warsaw, Ind.

JOMAC

INDUSTRIAL GLOVES
outwear ordinary gloves by 700%

"... a man who escapes the description 'politician' in its unkind sense . . ."

SOUTH BEND starts on p. 62

raise its single work shift from half time to full time. There's hopeful talk of two shifts in January. But for many thousand unemployed workers, the world is a bleak place.

Democrats in the Third District will build all this into their election campaign.

• **Candidates**—The three more rural counties of the district have supplied enough Republican votes to keep the Congressional seat in GOP hands since 1950. The Republican incumbent, running for reelection next month, is 37-year-old Shepard J. Crumpacker.

Crumpacker's personality lacks flash, and his speeches lack warmth. But he has many assets to set against this drawback—and, in the last two elections, these assets saw him through. His family is well known and highly respected around South Bend. He has the air of a solid citizen—of a man unassailably honest and sturdily independent. His voting record is conservative, though he has not supported Eisenhower on all issues.

His opponent, John Brademas, is a man who likewise escapes the description "politician" in its unkind sense. Brademas is a Harvard alumnus, a Rhodes scholar with a background of political science and philosophy. His manner is sharper, more alert than Crumpacker's. Perhaps his greatest drawback is the fact that he looks like a young intellectual. But his backers feel that his humble origin (his father was a Greek immigrant), and the fact that he has been both an athlete and a factory worker, will clear him of the unpopular taint of intellectualism. Certainly, the intellectual group around South Bend views him as the most attractive Democratic candidate there has been in years.

• **Bosses**—The men behind these two candidates are Tom Bath, acknowledged Republican boss of St. Joseph County, and Paul Butler, Democratic national committeeman of Indiana.

Bath has held only one public office—that of secretary of state in Indiana, a post he took over in the late 1940s. After one term, he retired to a prosperous insurance business in South Bend. From then on, he has concentrated on making kings rather than trying to become one himself. He is the most powerful single Republican in the Third District.

Paul Butler is being groomed to take over the job of Democratic national chairman. He risked his career when he

decided to back young Brademas for the Third District's Congressional seat; the primary fight was against several older Democrats who felt they had more claim on the seat than a young political science student with no experience in working politics. Had Brademas lost the primary, Butler's own hopes would have dimmed along with his candidate's.

Butler's attitude toward Brademas is almost fatherly. He admires the young man's knowledge of political theory, gloats over his growing surefootedness in the more earthy aspects of his chosen career.

• **How to Win**—Both Bath and Butler are in virtual agreement on what it will take for each candidate to win. Brademas must carry St. Joseph by at least 10,000 votes to offset the expected Republican margin in the other three counties. Crumpacker, to be safe, must hold his opponent's margin in St. Joseph to 8,000 or less.

Crumpacker's strategy is to make few speeches, do little that would stir up any really hot fires—particularly in St. Joseph. He feels that apathy on election day will help him. Because of strong Republican organization in the district, he's sure of a heavy Republican vote in the three rural counties no matter what he does personally. But if he makes too many speeches, takes too strong a stand on too many issues, he may bring out a heavy Democratic vote as well.

Brademas' strategy is exactly the opposite. His task between now and election day is to talk up issues, stir workers into a voting frame of mind. He must also get himself known outside St. Joseph; he is nowhere near so well known in the three other counties as Crumpacker.

• **Helpers**—The backbone of the Republican organization especially in St. Joseph County, is its army of women workers. Bath estimates that women are responsible for 75% of the Republican vote in the district. Already, these workers are staging "coffees for Crumpacker" throughout the area.

Brademas, on the other hand, has some powerful machinery on his side—the machinery of organized labor. Union leaders such as Louis Horvath, president of Studebaker Local 5 of the United Auto Workers (CIO), are plugging hard for the young Rhodes scholar. Union workers are going after their members through the mail, phone calls, and personal talks. Horvath and other leaders plan to put 500 cars into the field on election day to get the vote out.

One question hanging over all this activity is how many laid-off workers have stayed in the area. Republicans optimistically believe many of these workers, originally from the South, have gone back home now that things aren't

so good in the North. Democrats, equally optimistic, insist that most of them have stayed put. Even if the men themselves have gone elsewhere to seek work, Democrats argue, their families have stayed in the district.

• **Elkhart**—While Democrats have the edge in St. Joseph, Republicans are fairly solidly entrenched in the three other counties. Elkhart County, one of the two largely farm counties in the district, is the GOP stronghold.

Charles Ainlay, district Republican chairman and resident of Elkhart feels that the Republican position in his county is a strong one. Most Indiana farmers are sturdy Republicans, to begin with. The Elkhart County Republican organization is strong. There's little unemployment in the county, and Ainlay even has some labor support. Dave Harms, Indiana state labor commissioner and local AFL union leader, is one of the most active men in the Elkhart GOP machinery.

But Ainlay has his troubles. One of them is the fact that about one-tenth of the county's population is made up of Amish and Menonite farmers. Their creed frowns on worldliness, and they consider voting a worldly act. Ainlay feels they would be Republicans if he could get them to the polls.

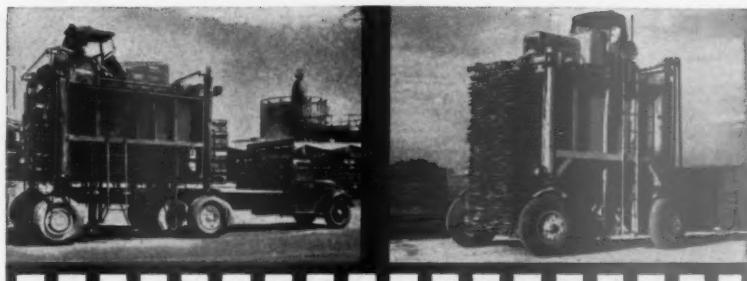
Another trouble is that in Elkhart, as in other agricultural areas, farmers have run into hard times. Overproduction of poultry, for instance, has brought prices down and squeezed profits. Some poultry men have been forced out of business. The ones who are left are against price supports of any kind—particularly supports on grain, which tend to keep poultry feed prices high. Indiana cattlemen are of the same mind.

Brademas and his Democratic team hope to capitalize on this unrest in the rural counties of their district. Ainlay, however, is counting on the traditional and deep-rooted Republicanism of the farmers to ward Brademas off.

• **St. Joseph**—A GOP asset in St. Joseph County is Republican Mayor Jack Scott, 38-year-old Marine veteran and English teacher. Bath heard him make a talk while still in uniform during the Korean War and tabbed him as his next candidate for mayor.

There hadn't been a Republican in City Hall for years, but a mid-afternoon blizzard on election day in 1951, after the Republican women had got out their vote, found the Democratic factory workers snowbound after work. The snowstorm is credited with electing Scott and earning him the title of "Act of God Mayor."

Regardless of whether or not he holds office by Act of God, Scott is a valuable man to the Republicans. Handsome, energetic, with a passion for clean government, he can swing a lot of votes in



One man loads it . . . in 3 seconds, up to 50,000 lbs . . .



One man drives it . . . speeds up to 56 mph

One man unloads it . . . in 3 seconds

You are invited to a free showing of

"Over-the-Load Materials Handling"

a 25-minute sound movie starring the ROSS CARRIER

You can revolutionize your handling operations! You can move materials faster, farther, at less cost, and this new movie shows you how to do it. As in the above pictures from the film, you'll see the Ross Carrier handling pineapples, whiskey barrels, lumber packages, heat exchangers, cotton bales, steel tube—for aggressive, cost-conscious companies which have discovered the unique advantages of over-the-load handling. If you are sincerely interested in knowing what's new in materials handling, you won't miss this free movie. It's available on a loan basis—simply send the coupon to reserve your showing. We'll mail the film to you—your only cost is return postage.

**CLARK
EQUIPMENT**

ROSS CARRIER DIVISION
CLARK EQUIPMENT
COMPANY
Benton Harbor 42, Mich.

Send "Over-the-Load" movie for showing on (give 2 choices):

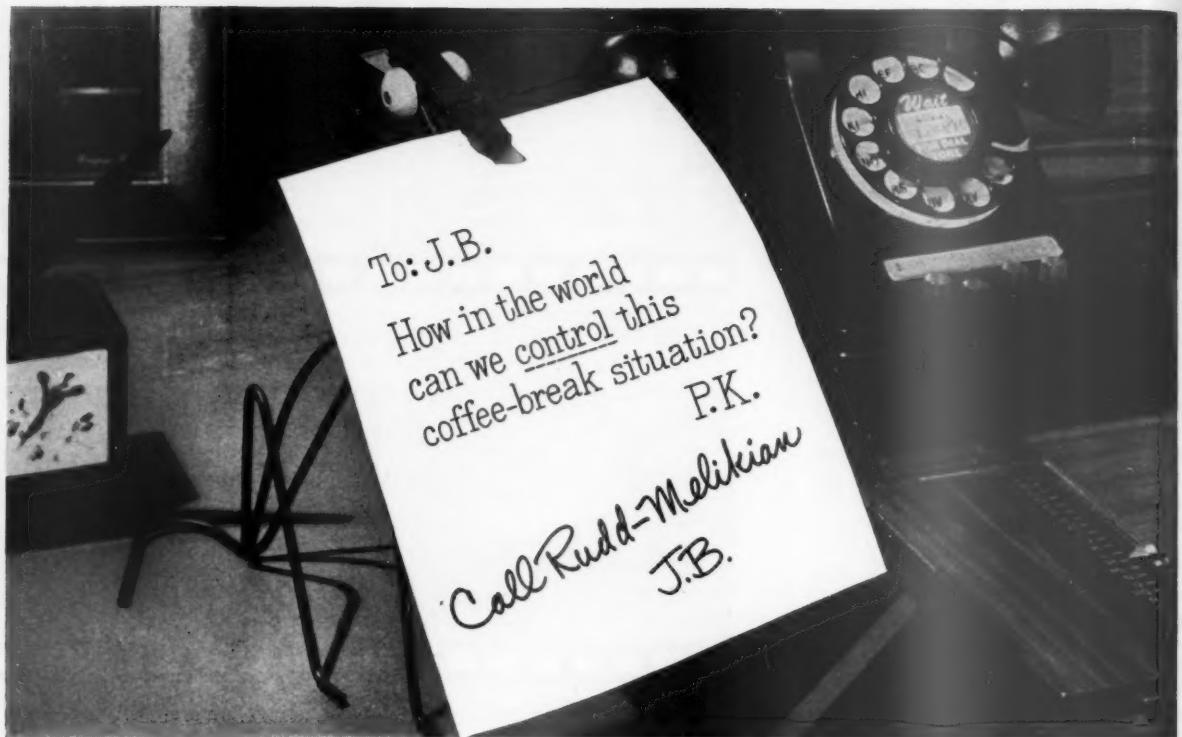
Dates 1) _____ 2) _____

Name _____

Firm _____

Address _____

City _____



Right J. B.! Only R-M's Kwik-Kafé system provides complete coffee-break control!



SAVES MAN HOURS. Most business executives recognize the advantages of the "coffee-break" ... how it reduces worker fatigue; increases morale and productivity. The big question is: How to control it and save lost man hours?

You don't have complete control unless you have Kwik-Kafé



COMPLETE COFFEE-MAKING MACHINE. All Rudd-Melikian models are fully automatic dispensers ... produce a freshly-made cup of delicious coffee or a refreshing soft drink at the flip of a switch. Models available for any office or plant regardless of size or location.

You don't have complete control unless you have Kwik-Kafé



REALLY GOOD COFFEE. Appetizing KWIK-KAFÉ—freshly made from quick-frozen concentrate with the flavor locked in until it's released. KWIK-KAFÉ is 100% pure coffee. Not a powder nor an "instant." Sugar and dairy-fresh chilled cream added as desired—Every cup identical in freshness and flavor!

You don't have complete control unless you have Kwik-Kafé



FOLLOW-UP SERVICE. When you put R-M dispensers in your plant, your worries are over. Your local franchised dealer is dedicated to maintaining the high quality of the products served. Uniformed attendants provide service.

You don't have complete control unless you have Kwik-Kafé



PROVED IN MANY PLACES. These automatic coffee dispensers have been installed in many plants and offices—from the largest automotive manufacturer to the smallest local shop—and have provided complete control of the coffee-break. A model suitable for every location.

You don't have complete control unless you have Kwik-Kafé



RUDD-MELIKIAN—PIONEERS! Many R-M automatic coffee dispensers on locations more than seven years have passed the million-cup mark and are still offering heavy-duty service. No other manufacturer of automatic drink merchandisers can duplicate this record of dependability and performance!

You don't have complete control unless you have Kwik-Kafé

NOTE: R-M franchises make profitable business investments. Write now for information!

RUDD-MELIKIAN, INC., 1949 N. HOWARD ST., PHILADELPHIA 22, PA.

a place where they will count. His administration, plus the fact that for the first time in years the Republicans have the City Hall patronage, is expected to be good for at least 2,000 votes election day.

Another asset on the Republican books is newspaper support. As in Kansas City, the Democrats aren't getting much help from the press. The South Bend Tribune is supporting Crumpacker all out. This lack of newspaper support is one thing that has forced Brademas to go to heavily for television and radio.

On the Air—This is the first time that television has been used in the district for a local election. Both candidates are running weekly series on the two stations in the area. Brademas forces are counting heavily on TV to sell their candidate to the rural counties where he is not well known. They think TV gives him an advantage over Crumpacker, and they have tried unsuccessfully to stage a TV debate between the two.

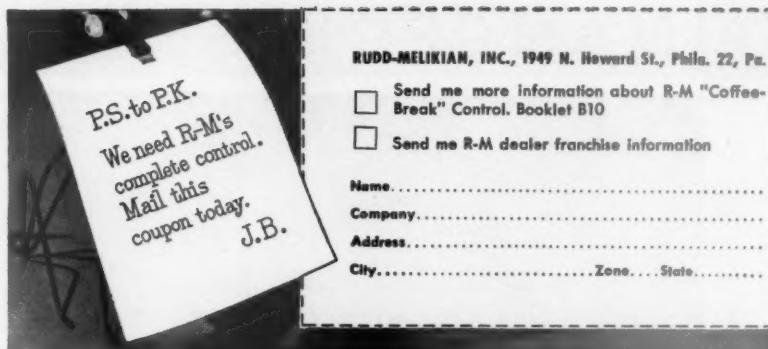
Crumpacker has accepted at least two nontelevised debate engagements in St. Joseph County. But Brademas is not too happy about them. "So far," he complains, "they have all been before groups who normally would be for me and against him. So he has nothing to lose. Why won't he debate me before the Parent-Teachers, civic clubs, or business groups?"

The two debates between the candidates have been before a World Federalist group that was strong for Brademas and a union local, also heavily pro-Brademas.

Crumpacker and his strategists, knowing the makeup of their district, see no point in taking Brademas on in Republican territory or outside St. Joseph County where he might be unveiled to voters who otherwise would never see him.

No Issue—Democratic strategists have successfully kept the Communist issue out of the campaign. All over the district, Brademas has given a speech titled "The Christian Answer to Communism" in which he presents militant Christianity as the only effective answer to the Reds. Brademas has New Deal leanings, is strong for social and welfare legislation and might be vulnerable to the Red tag in the eyes of conservative voters if it were not for his strong anti-Communist opinions, which he advanced well before the Congressional race started.

Democrats also consider it an asset that he has been active in church work—he is a Methodist—and has taught Sunday school since his return to South Bend. He is much in demand in pulpits around Indiana as a lay speaker. This as much as anything else has helped to keep the "egghead" label off him.



RUDD-MELIKIAN, INC., 1949 N. Howard St., Phila. 22, Pa.

Send me more information about R-M "Coffee-Break" Control Booklet B10
 Send me R-M dealer franchise information

Name.....

Company.....

Address.....

City..... Zone..... State.....

The following is a partial list of R-M dealers from coast-to-coast who provide complete "coffee break" control. Mail coupon for information.

KWIK KAFE OF ARKANSAS
 701 Main Street, Little Rock, Ark.
KWIK KAFE OF KERN
 707 Loch Lomond Dr., Bakersfield, Cal.
KWIK KAFE OF THE SAN FERNANDO VALLEY
 3400 W. Burbank Blvd., Burbank, Cal.
KWIK KAFE COFFEE SERVICE OF SOUTHERN CALIFORNIA
 5225 Wilshire Blvd., Los Angeles 36, Cal.
COFFEE SERVICE OF CALIFORNIA, INC.
 3038 Market St., Oakland, Cal.
KWIK KAFE OF RIVERSIDE
 4390 Adams St., Riverside, Cal.
KILPATRICK'S KWIK KAFE AUTOMATIC COFFEE SERVICE
 2248 Burney Way, Sacramento, Cal.
AUTOMATIC COFFEE SERVICE OF SALINAS
 428 Salinas Street, Salinas, Cal.
KWIK KAFE COFFEE SERVICE
 134 North San Pedro, San Jose, Cal.
KWIK KAFE OF STOCKTON
 1123 North Wilson Way, Stockton, Cal.
COFFEE, INC.
 383 South Pearl St., Denver 9, Colo.
KWIK KAFE OF NEW HAVEN CO., INC.
 1170 Pembroke St., Bridgeport, Conn.
CONSOLIDATED VENDING SERVICE
 5 Woodside Street, Stamford, Conn.
KWIK KAFE OF DELMARVA
 Box 102, New Castle, Del.
KWIK KAFE OF DELAWARE, INC.
 1008 North Lincoln, Wilmington, Del.
KWIK KAFE OF NORTH FLORIDA, INC.
 419 Margaret St., Jacksonville, Fla.
KWIK KAFE OF WESTERN FLORIDA
 2316 Woodbine Ave., Lakeland, Fla.
KWIK KAFE OF ILLINOIS
 2456 S. Michigan Ave., Chicago 16, Ill.
KWIK KAFE OF SPRINGFIELD
 845 South Fourth St., Springfield, Ill.
KWIK KAFE COFFEE SERVICE CO.
 2005 Maumee Ave., Fort Wayne, Ind.
KWIK KAFE OF KANSAS, INC.
 508 West 29th Street, Wichita, Kans.
KWIK KAFE OF NEW ORLEANS
 1019 Carondelet Bldg., New Orleans, La.
KWIK KAFE OF SHREVEPORT
 3900 Michigan Blvd., Shreveport, La.
KWIK KAFE, INC.
 238 N. Franklin Rd., Baltimore, Md.
HOW-DEE CO., INC.
 AUTOMATIC FOOD MERCHANDISING DIV.
 1156 State Street, Springfield, Mass.

SELF SERVICE FOOD, INC.
 1170 Main Street, Worcester, Mass.
AUTOMATIC BEVERAGE CO.
 114 Garrison Ave., Battle Creek, Mich.
KWIK KAFE, INC.
 319 W. 14-Mile Rd., Clawson, Mich.
KWIK KAFE OF DETROIT, INC.
 12223 Hamilton Ave., Detroit 3, Mich.
KWIK KAFE OF KANSAS CITY, INC.
 821 Columbia Bank Bldg., Kansas City, Mo.
KWIK KAFE OF ST. LOUIS, INC.
 4602 Olive St., St. Louis 8, Mo.
KWIK KAFE OF NEBRASKA, INC.
 1736 S. 13th St., Omaha 9, Nebr.
KWIK KAFE OF SOUTH JERSEY
 1431-37 Ferry Avenue, Camden, N.J.
COFFEE VENDING SERVICE, INC.
 120 Elm Street, Orange, N.J.
KWIK KAFE AUTOMATIC COFFEE SERVICE, INC.
 319 Centre Street, Trenton 10, N.J.
KWIK KAFE OF BINGHAMTON
 10 Wallace Rd., Binghamton, N.Y.
AUTOMATIC COFFEE SERVICE, INC.
 821 Elk Market Terminal, Buffalo 4, N.Y.
KWIK KAFE COFFEE SERVICES OF CENTRAL NEW YORK, INC.
 Newcourt Rd. & North Ave., East Syracuse, N.Y.
KWIK KAFE OF ELMIRA
 1002 Maple Ave., Elmira, N.Y.
COFFEE VENDING SERVICE, INC. (N.Y.C.)
 59-05 56th St., Maspeth, L.I., N.Y.
KWIK KAFE COFFEE SERVICE
 16 Meyer Ave., Poughkeepsie, N.Y.
K. O. R., INC. KWIK KAFE
 857 Portland Ave., Rochester, N.Y.
QUICK COFFEE OF CAROLINA, INC.
 823 East Franklin St., Gastonia, N.C.
CAROLINA HOT COFFEE SERVICE
 805 Maupin Avenue, Salisbury, N.C.
KWIK KAFE COFFEE DISTRIBUTING CO.
 Box 1347, Statesville, N.C.
KWIK KAFE OF PIEDMONT, CAROLINA
 716 Lockland Avenue, Winston-Salem, N.C.
THE WI-SI CO., INC.
 57 Vesper Street, Akron, Ohio
KWIK KAFE OF CINCINNATI
 4 West St. Clair St., Cincinnati, O.
KWIK KAFE AUTOMATIC SERVICES, INC.
 1900 Superior Ave., Cleveland, O.
AUTOMATIC VENDING ENTERPRISES, INC.
 3318 West Second Street, Dayton, O.
KWIK KAFE OF COLUMBUS, INC.
 1225 W. Third Ave., Columbus 12, Ohio

MANSFIELD KWIK KAFE
 54 Sturges Ave., Mansfield, O.
AUTOMATIC VENDING ENTERPRISES, INC.
 626 East Center St., Marion, Ohio
KWIK KAFE OF PORTLAND
 808 S.E. Hawthorne, Portland, Oregon
INDUSTRIAL VENDING SERVICE
 3018 Butler Pike, Conshohocken, Pa.
KWIK KAFE OF ALLENTOWN
 R. D. #2, Kutztown, Pa.
KWIK KAFE OF LANSDALE
 109 N. Cannon Ave., Lansdale, Pa.
KWIK KAFE OF PHILA., INC.
 1023 Marlborough St., Phila. 25, Pa.
QUICK COFFEE CORPORATION OF WESTERN PENNSYLVANIA
 3261 Babcock Blvd., Pittsburgh 9, Pa.
KWIK KAFE OF READING
 101 Fern Avenue, Reading, Pa.
VALLEY VENDING CO.
 143 Darling St., Wilkes-Barre, Pa.
KWIK KAFE OF CHARLESTON, S.C.
 23 Laurel Avenue, Charleston 31, S.C.
KWIK KAFE COFFEE DISTRIBUTORS
 920 Pulaski Street, Columbia, S.C.
COMMODITIES, INC.
 205 Scott Street, Memphis 12, Tenn.
AUTOMATIC MERCHANDISING CO.
 415 Fourth Ave., S., Nashville, Tenn.
KWIK KAFE COFFEE SERVICE
 1433 Antelope St., Box 323, Corpus Christi, Tex.
KWIK KAFE COFFEE SERVICE, INC.
 2026 Farrington St., Dallas, Tex.
KWIK KAFE COFFEE SERVICE
 4601 Roseland, Houston 6, Tex.
L. C. DISTRIBUTING CO.
 Route 13, Box 612, San Antonio, Tex.
KWIK KAFE OF CENTRAL TEXAS
 1118 South 53rd St., Temple, Tex.
KWIK KAFE OF UTAH
 2810 Washington Blvd., Ogden, Utah
JAMES R. GORMAN, JR.
 221 Lansing Avenue, Lynchburg, Va.
KWIK KAFE OF RICHMOND
 404 N. Robinson St., Richmond 20, Va.
NORTHWEST KWIK KAFE, INC.
 6415 Phinney Avenue, Seattle 3, Wash.
KWIK KAFE COMPANY
 3123 Roosevelt Road, Kenosha, Wisc.
AUTOMATIC COFFEE SERVICE
 2102 N. Bartlett Ave., Milwaukee, Wisc.
AUTOMATIC FRESH COFFEE SERVICE OF OTTAWA
 566 Edison Avenue, Ottawa, Ont., Canada
KWIK KAFE S.A., GENÈVE
 Rue du Mont Blanc 9, Geneva, Switzerland



THE COFFEE CUB
 Serves delicious KWIK-KAFE coffee in any location. Also available with hot chocolate.

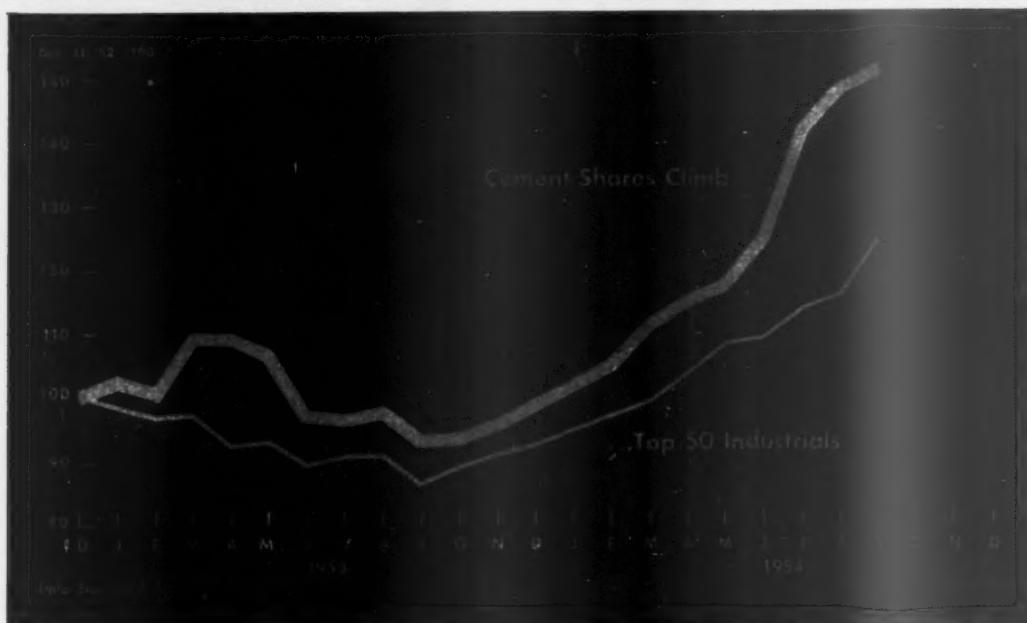
COFFEE-JUICE UNIT Hot KWIK-KAFE coffee plus Minute Maid Orange Juice or Lemonade, and hot chocolate.

AUTOMATIC DISPENSER Dispenses 450 cups of KWIK-KAFE and hot chocolate with one servicing.

4-IN-1 COMBINATION Serves KWIK-KAFE coffee and three cold beverages.

RUDD-MELIKIAN—CREATORS OF AN INDUSTRY

FINANCE



And Here's the Way Business Has Grown

Company	(millions of dollars)						
	1940	1950	1951	1952	1953	1st Half 1954	1st Half 1953
Alpha Portland Cement							
Sales	\$ 7.7	\$21.5	\$24.3	\$25.3	\$25.7	\$26.7*	\$25.1*
Pre-Tax Profit	1.2	6.0	6.9	6.3	6.3	6.8*	6.2*
Net Income	.9	3.3	2.6	2.8	2.8	3.3*	2.7*
Per Common Share	\$1.44	\$5.59	\$4.39	\$4.74	\$4.77	\$5.57*	\$4.54*
General Portland Cement							
Sales	7.5	28.2	27.1	29.4	30.1	15.8	15.4
Pre-Tax Profit	1.9	11.0	11.8	11.4	10.4	6.1	5.8
Net Income	1.3	5.9	4.6	4.8	5.2	3.1	2.8
Per Common Share	\$1.33	\$5.68	\$4.36	\$4.71	\$5.03	\$3.00	\$2.69
Lehigh Portland Cement							
Sales	16.9	44.7	50.8	53.6	58.5	24.7	26.0
Pre-Tax Profit	2.7	12.2	14.4	13.2	12.8	5.1	5.6
Net Income	2.0	6.6	5.5	5.8	6.3	2.7	2.5
Per Common Share	\$2.41	\$6.89	\$2.90*	\$3.07	\$3.32	\$1.40	\$1.31
Lone Star Cement							
Sales	22.7	64.4	71.4	81.0	78.7	39.6	37.1
Pre-Tax Profit	4.6	18.4	21.2	19.9	20.7	10.9	9.6
Net Income	3.6	10.0	8.9	9.1	9.3	5.7	4.0
Per Common Share	\$3.57	\$10.57	\$3.14**	\$3.19	\$3.37	\$2.01	\$1.42
Penn-Dixie Cement							
Sales	7.4	22.8	25.6	24.9	27.9	13.7	12.6
Pre-Tax Profit	.9	6.3	7.5	5.8	8.1	3.7	3.3
Net Income	.7	3.2	2.8	2.7	3.6	2.0	1.4
Per Common Share	**	\$5.34	\$4.58	\$4.44	\$5.37	\$2.76	\$2.33

*common stock was split 2-for-1 in 1951

**common stock was split 3-for-1 in 1951

**not enough to cover dividend requirements on \$7 preferred stock then outstanding

\$12 months ended June 30

© BUSINESS WEEK

Riding the Building Boom

Ever since World War II, cement sales have been riding high on the coattails of construction activity—homes, highways, industrial buildings, and dams. As a result, the cement company shares have been doing better than the industrials generally for the past year and a half (chart).

Consistently, the cement shares have

been more stubborn in times of market decline, more buoyant in times of rise. Thus, Standard & Poor's cement index declined only 9.6% from the Eisenhower-election high of January, 1953, to the low the following September. In the same stretch S&P's index of 50 industrials dropped 16%.

On the up side, the cements had a

similar advantage. In the climb since the September, 1953, lows, their index has gone up 67%, compared with 48% for the industrials.

• **Solidar**—All this is a far cry from the old days when cement shares were rated a highly speculative investment, subject to feast-and-famine sales and earnings, and still haunted by the extreme over-

For attractive offices where and when you want them



NEW Johns-Manville
CLASS A MOBILE ASBESTOS WALLS

are noncombustible... lower priced,
come in pleasing colors

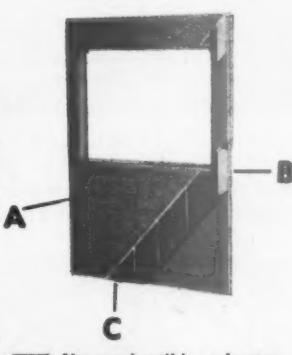
Johns-Manville Class A Movable Walls combine a handsome appearance so important to an attractive office with the long-time economies of quick, easy space partitioning and rearrangement. They offer you advantages never before combined in an asbestos movable wall.

Class A Movable Walls are noncombustible. They consist of an all-mineral core and sturdy asbestos-cement surfaces. The attractive finish is a tough, hard film many times thicker than on the usual movable partition. It is mar and scratch resistant... rejects stain and soil... can be easily washed and even scrubbed, if necessary. If damaged, Class A Movable Walls can be touched up inexpensively to look like new... and,

unlike other types of factory-finished partitions, can be repainted with ordinary paint.

Both flush and glazed partitions are available in ceiling high or free standing heights. Walls are erected complete with doors, door hardware, glass and trim. They are installed by Johns-Manville's own Construction Department, thus every job, large or small, receives the benefit of Johns-Manville undivided responsibility.

An estimate will convince you that the cost of J-M Movable Walls compares favorably with other types of wall construction. For details, write Johns-Manville, Dept. BW, Box 158, New York 16, N.Y. In Canada write 199 Bay Street, Toronto 1, Ontario.



- A** Noncombustible asbestos-cement surfaces.
- B** Generous reinforcing for added strength.
- C** Noncombustible all-mineral insulating core.



Johns-Manville



"Here's the ad we prepared for tomorrow's paper on the dress promotion, Mr. Scott. It will appear in the newspapers at the same time our shipment arrives at the store from the Erie freight station for our sale tomorrow. I'd call that good timing!"



"You mean, dependable service, Miss Jones! We've relied on the Erie for years, and they come through every time. Our Erie shipments are always on time to give us early morning delivery to the store for our advertised sales."



Erie's fast freight trains give shippers the advantage of dependable delivery when promised. Teamwork by Erie people all along the line is the answer—another reason for the Erie's reputation as "first in freight." For safe, dependable transportation call your nearest Erie representative.



"... the frightened fawn attitude with which mills approach price rises . . ."

CEMENT STOCKS starts on p. 68

expansion of mills that took place in the 1920s.

Things have been rosily different ever since 1946, with the prolonged construction boom (BW—Sep. 18 '54, p31). Steadfast demand has brought a rise in output from the 65%-68% of capacity prevalent in 1946, to the current 93%-95%. Despite the ready market, the expansion-burned child has feared the fire; only 18% has been added to capacity since the war.

• **New Charms**—The earnings table on page 68 lends point to the charm that investors are finding in the cement stocks.

Sales have been nearly tripled since prewar years by the big five publicly owned cement companies; and earnings are up in handsome style. (The industry's largest single producer, Universal-Atlas, is a subsidiary of U. S. Steel.)

The impression is rather widespread that the cement companies have lagged behind the procession in boosting prices to meet increased production costs. Cement prices are now 75% above prewar, while commodities generally have doubled, and building materials as a whole have tripled.

• **Cautions**—Wall Street tends to attribute the slower rise of cement prices to the idea that the industry keeps peering back over its shoulder to see if the government is watching. Back in 1938, the Federal Trade Commission first threw rocks at the Cement Institute as an "instrument of monopoly." Since 1948, by federal court ruling, the institute has ceased to bind the industry into a tight unit.

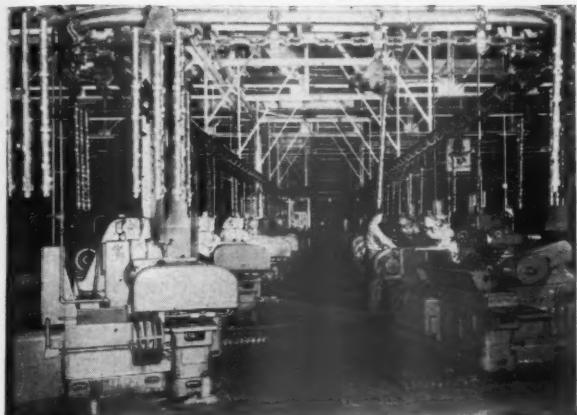
The frightened fawn attitude with which the mills approach price rises was well illustrated within the month. During May and June, many Eastern mills were closed by a seven-week strike. Ultimately the strike was settled with a 5¢-an-hour raise in basic pay, plus numerous fringe benefits. It was widely reported that prices would be raised accordingly in the fourth quarter—the first moment when a rise would be possible under the industry guarantee that prices once issued will hold for three months. However, no such rise came through; the mills simply swallowed the higher labor costs.

• **Dividends**—The Big Five have also been very conservative in their dividend policies. Last year, Alpha Portland Cement earned \$4.77 per common share and paid out only \$3. General Portland Cement earned \$5.03 and paid \$3; for Lehigh Portland it was \$3.32 and \$1.20;

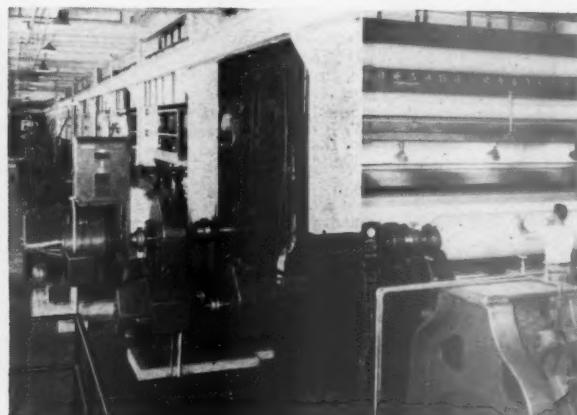
BUILT AND APPLIED BY RELIANCE

THE Tools of Automation

INCREASE PROFITS IN EVERY INDUSTRY



In a camshaft production line, Reliance V*S Drive system provides stepless, easily adjustable speeds for fast, precision machining. Optimum cutting speeds extend tool life, reduce downtime.



On a high-speed newsprint machine, the Reliance V*S Drive system provides unsurpassed accuracy and dependability, maintaining precise speed relationships and correct draw adjustments between all sections.



Operator's
Control Station



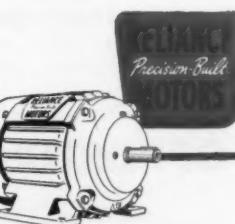
Control Unit

Adjustable-Speed
Drive Motor

Greater machinery output . . . improved production efficiency . . . both result in increased profits. And both result from using the Tools of Automation: Reliance electric motors, adjustable-speed drives, electronic controls, and applied engineering. They're setting new standards for low cost production in *every* industry.

These Tools of Automation can most efficiently lower your costs, because they're designed and applied to *your* specific situation. Reliance Application Engineers are backed by nearly 50 years' experience in perfecting the drive systems that can help you attain the degree of automatic production you require. For further information, write for the new booklet, "The Tools of Automation".

A-1487



RELIANCE ELECTRIC AND
ENGINEERING CO.

Sales Representatives in Principal Cities

•

1069 Ivanhoe Road, Cleveland 10, Ohio

fawn
mills
."
p. 68
in the
nt ever
d con-
4, p31).
rise in
capacity
at 93%
et, the
ed the
to ca-

ble on
m that
cement
d since
publicly
arnings
industry
iversal-
el.)
espread
lagged
g prices
costs.

ve pre-
y have
s as a

to at-
prices
s peer-
if the
1938,
n first
tute as
Since
the in-
industry

ce with
e rises
month.
Eastern
strike.
d with
, plus
widely
ased ac-
ne first
ossible
prices
onths.
rough;
higher

ce also
dividend
and Ce-
share
Portland
\$3; for
\$1.20;

9, 1954

2,500,000 Shares

The National City Bank of New York

Capital Stock

(Par Value \$20 Per Share)

Holders of the Bank's outstanding Capital Stock are being offered the right to subscribe at \$52.50 per share for the above shares at the rate of one share for each 3 shares of Capital Stock held of record on September 24, 1954. Subscription Warrants will expire at 3:00 P.M., Eastern Standard Time, on October 22, 1954.

The several Underwriters have agreed, subject to receiving opinions of counsel, to purchase any unsubscribed shares and, both during and following the subscription period, may offer shares of Capital Stock as set forth in the Offering Circular.

The Chairman of the Board, in his letter of August 18, 1954 to the Bank's Shareholders, said in part:

"In recommending [the increase in capital funds], the Board of Directors affirms its faith in the continuing growth of the American economy, and recognizes the responsibility of banking institutions to keep pace with the expansion of the businesses which they serve. The growth of population and national product, the achievements of research and of business management, and the resulting needs for capital and credit, all point to expanding demands for banking accommodation. The increase in our capital funds will enhance our ability, both as depository and lender, to meet these demands. It will strengthen our position of leadership and increase our capacity to attract new business. It is in the interest of the shareholders, since it will provide a firm basis for continued growth."

Copies of the Offering Circular may be obtained from any of the several underwriters only in States in which such underwriters are qualified to act as dealers in securities and in which the Offering Circular may legally be distributed.

The First Boston Corporation

Morgan Stanley & Co.	Kuhn, Loeb & Co.	Blyth & Co., Inc.	Harriman Ripley & Co. Incorporated
Dominick & Dominick	Goldman, Sachs & Co.	Lazard Frères & Co.	Lehman Brothers
Clark, Dodge & Co.	Ladenburg, Thalmann & Co.	Merrill Lynch, Pierce, Fenner & Beane	
Salomon Bros. & Hutzler		Stone & Webster Securities Corporation	
Union Securities Corporation		Dean Witter & Co.	

BUSINESS • INDUSTRIAL • FINANCIAL
REAL ESTATE • PERSONNEL • COMMERCIAL

OPPORTUNITIES

MAY BE SOUGHT FROM, OR OFFERED TO, MANAGEMENT-MEN
THROUGH BUSINESS WEEK'S CLASSIFIED SECTION . . . clues

"... a lively future is seen for defense projects that consume cement . . ."

CEMENT STOCKS starts on p. 68

for Lone Star, \$3.27 and \$1.75; for Penn-Dixie, \$5.57 and \$2.30.

• **More to Come**—Those Wall Streeters who are touting the cement stocks base their thinking on confidence that the construction boom will continue. They point with pride to these facts and beliefs:

- Residential construction continues on a high plateau, with 1954 likely to be the sixth straight year in which starts have topped 1-million. Mortgage money is abundant, and terms are liberal on home buying.

- Industrial and commercial construction is brisk. Many think it will find a long-time buttress in the just-beginning movement of factories to suburban areas.

- The building of new roads of all sorts, along with bridges, is on the rise. Maintenance and repair spending is also going up. Over-all, the crest may not be passed for years.

- Nearly all existing airport runways will have to be rebuilt in the very near future to accommodate heavier commercial and military aircraft.

- Conservation programs are likely to stay on a high level for years—and dams, flood control projects, and power generating work all devour enormous quantities of cement.

- A lively future is seen for defense projects that consume cement and concrete.

• **Good Times or Bad**—There's a widespread view in Wall Street that the cement business will remain brisk whether the nation has good times or bad. The argument is that a depression-born cut in home and industrial construction would be balanced by an expanded government program of highway, airport, flood control, and defense work—all aimed at spurring employment.

It adds up to a rather diversified market for cement. Right now, about 33% of production goes into building construction; 15% into streets and highways; 15% into conservation work; 9% into farm projects; 7% into sewers and water supplies; 5% into bridges; and 2% into railroads. A scattering of uses take up the remaining 14%.

• **Built-In Protection**—Another advantage that the cement mills enjoy, according to Streeters, is the fact that their product, being very heavy, is generally sold within a 200-mi. radius. And, since mills are costly to build, competition is unlikely to invade the 200-mi. area.

seen
that

p. 68

5; for

lecters
s base
at the
They
and be-

contin-
likely
which
mortgage
liberal

con-
t will
just-
es to

of all
e rise.
is also
y not

run-
e very
eavier

likely
s-and
power
ormous

or de-
nt and

wide-
t the
brisk
nes or
ession-
al con-
by an
high-
fense
ploy-

l mar-
33%
; con-
high-
; 9%
ers and
; and
f uses

advan-
accord-
their
generally
And,
com-
00-mi.

9, 1954



CORRUGATED bulk container holds half a ton, replaces 5 drums, costs up to 75% less

A frontier fell when this new, large-size corrugated container came into use recently, because it signaled the beginning of a new era of economy and convenience in bulk packaging.

Here it's used to ship plastic granules, fine as rice, in 1000 lb. quantities. The multiwall corrugated container does a job that formerly required five cylindrical drums. And the resulting package, steel strapped to an expendable skid, is sturdy enough for either rail or truck shipment.

Look at the savings: up to 75% on the cost of the package. Reduced shipping charges through less weight. Time in

loading that can be translated into dollars. Storage of one third more volume in the same floor space.

Look at the convenience: boxes come to the user flat, so they take little space while empty; far fewer boxes are required; packages handle easily by fork truck; and customers appreciate the speed of emptying them.

Bulk shipping containers of corrugated board can be used to ship such varied materials as sugar, flour, rub-

ber, or an infinite variety of powdered chemicals. Your nearby boxmaker can show you how much you can save. He's listed in the yellow pages of your telephone directory.

Corrugated containers can be made so inexpensively today because of the incredible efficiency of Langston machines—capable of turning out corrugated board at speeds up to 650 feet per minute. *Samuel M. Langston Co., Camden 4, N.J.*

LANGSTON

Corrugated Container Machinery

Clouding Canada's Blue-Skies

Securities agencies on both sides of the border are cracking down on dealers in fraudulent stocks. The dealers, now quartered in Quebec, still find suckers, though.

A particularly potent combination of words in the investment world today is "Canadian uranium," though "Canadian oil" and even "Canadian copper" pack a punch, too. In fact, if you have any stock to sell, prefix the name of the security with the magic word "Canadian" and you're in.

Not since the 1920s, when Canadian gold and oil stocks boomed in the vanguard of speculative favorites, has the Dominion figured so prominently in the eyes of investors. The big drawing card is uranium, a word that in itself is sufficient to mesmerize would-be Rockefellers with some ready cash.

As the get-rich-quick fever has mounted, so has the number of slick securities peddlers operating from Canada.

• **Caveat**—Last week's action by two of Canada's largest securities exchanges—the Montreal Stock Exchange and the Canadian Stock Exchange—calls attention to the wave of blue-sky stock sellers from Ontario to Quebec, and points up the worsening situation in highly speculative—often fraudulent—Canadian stocks.

The two exchanges warned their members not to cooperate with "high-pressure stock promoters . . . presently engaged in selling highly speculative stocks to U.S. residents by telephone, mail, and personal solicitation in contravention of U.S. security laws."

• **Going East**—The shift in operations of phony Canadian brokers from Ontario to Quebec came about largely because of the success of the Ontario Securities Commission in cracking down on fraudulent and deceptive practices. The commission has vigorously applied U.S. security laws to Canadian dealers who were selling to Americans (BW—Jul. 17 '54, p73).

Quebec is planning a similar enforcement setup with a toughened securities commission. Until it gets rolling, however, the two exchanges have to content themselves with tightening up on listed securities and their own members, and with admonishing American investors to "investigate before you buy."

• **New York Action**—In the States, decisive action was taken, too. The New York State Attorney General last month enjoined four Canadian corporations and nine individuals, four of them Americans, from further securities dealings in the state until after a hearing. The Attorney General's office stated that the evidence of fraud was "over-

whelming" in this case, which is believed to have taken U.S. investors for some \$5-million through sales of stock in mythical oil gushers in the Gaspe.

• **Bill of Goods**—In cracking down on Gaspe Oil Ventures, Ltd., and Quebec Oil Development, Ltd., the Attorney General cited fraudulent practices such as these.

• "Falsely listed operational losses as assets . . ."

• Disseminated a "flood of literature containing false and misleading statements and representations," which skyrocketed "the market price of Gaspe stock some 600% and that of Quebec Oil over 200% despite the mounting losses."

• A Canadian who headed Quebec Oil was cited as selling, "in violation of both Federal and state laws, . . . about 270,000 shares of his own personal stock holdings in Quebec Oil as part of a 2-million share registered issue that was sold to the public at \$1 a share, concealing the fact that it was his own stock."

• **SEC Action**—The New York Attorney General, who plans future moves against illegal sellers of both oil and uranium stocks operating out of Canada, isn't the only one swinging at the fly-by-nighters. The Securities & Exchange Commission has long kept a blacklist of unregistered securities that are being illegally offered in the States.

However, as SEC chairman Ralph H. Demmler pointed out in commenting on registering of prospectuses with the commission, "people who dream of fortunes are discouraged by nothing that is said in the cold print of a prospectus."

• **Easy Marks**—The gullibility of the get-rich-quick investor is still perhaps the biggest obstacle to cleaning up fraudulent securities dealings, most enforcing agencies find. When a phony broker calls a likely mark and offers some hot uranium stock for a few cents a share, the sucker bites.

After that, in the usual routine, the "broker" calls back a few weeks later to tell the sucker of tremendous profits just around the corner. Despite the fact that the price of his stock has tripled or even quadrupled, he can still buy another large chunk for a "special" price—maybe twice what he paid for his original stock. If he buys, he will probably never hear from his "broker" again. Instead, he finds that there is no market for the stock.

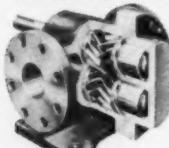
Make sure your company
has full information
on these

COST-CUTTING Sier-Bath ROTARY PUMPS



Check.. Cut Out
..Mail This Coupon

Low Cost Gear Pump for Heavy Duty



■ "Hydrex" Pumps. Lower original cost, maintenance cost, longer life through extreme simplicity.

Cut Costs of Pumping Non-lubricating Liquids



■ "Gearex" Pumps. No metallic contact in pumping head. Maintain volumetric efficiency.

Longest Life in Toughest Service



■ Screw Pumps. Modern "bracket" design maintains efficiency, eliminates rotor distortion, speeds servicing.

Sier-Bath GEAR & PUMP CO., INC.
9258 Hudson Blvd., North Bergen, N. J.

Please send literature on pumps checked above.

Name.....

Title.....

Company.....

Address.....

.....

Founded 1905
Mfr. of Precision Gears, Rotary Pumps, Flexible Gear Couplings

Member A. G. M. A.

Find of the year for the engineer!

HYATT BARREL BEARING!



For a long time design engineers have been seeking the "ideal" self-aligning, dual-purpose bearing—able to handle loads from any direction even under conditions of misalignment.

Now they've found it—the new Barrel Bearing perfected by HYATT after years of research. Its barrel-shaped rollers conform to curved raceways and automatically adjust for shaft misalignment without cramping roller ends. Its large areas of contact between rolling elements provide more capacity, longer life and less maintenance. All loads are concentrated at the largest diameter of the rollers—their strongest part.

HYATT Barrel Bearings are ideal for a wide range of applications—at prices far lower than you'd expect. No wonder so many designers are so enthusiastic about the HYATT Barrel Bearing that *does so many jobs better*. If you have a bearing problem, this may be your answer. May we send you full details? Hyatt Bearings Division, General Motors Corp., Harrison, New Jersey.

HYATT
ROLLER
BEARINGS

STRAIGHT

BARREL

TAPER

A new kind of

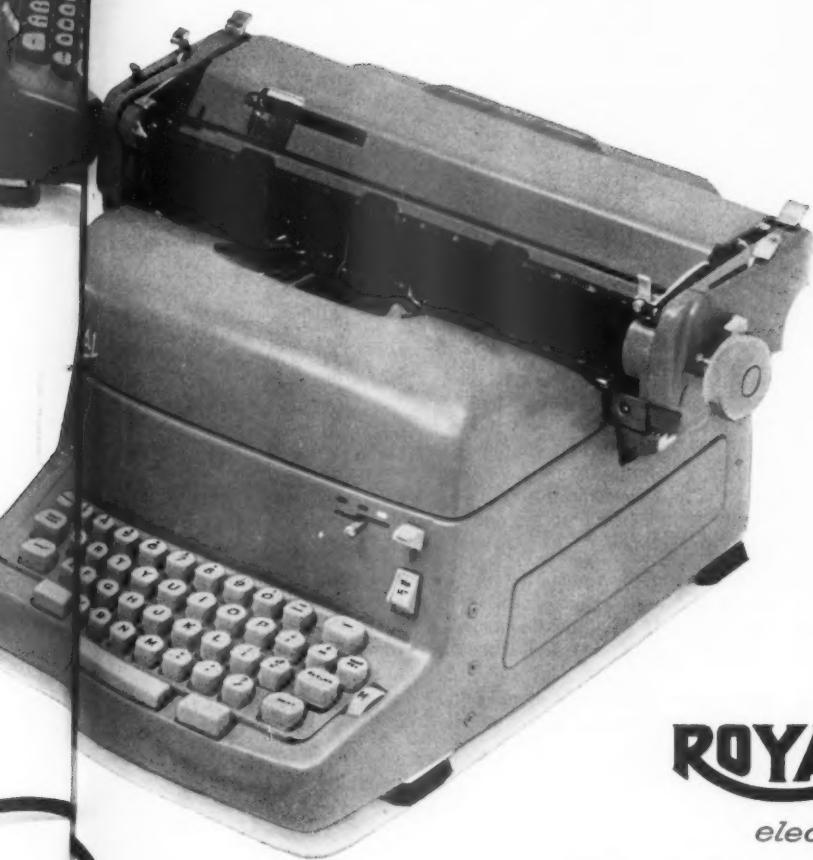


of electric typewriter

...that drives down costs and boosts morale!

You get more typing from every typist with the new Royal Electric.
And the typists love it!

You see, seven vital improvements build more work right into
a new Royal—and more work means less money from you.



Better work's easier with the new Royal Electric. You'll sense it from letters you'll be proud to sign . . . from the stack of finished memos on your desk. And if you don't believe it, watch that five o'clock smile on your secretary's face.

Your typists will tell you how much fun their jobs have become if you outfit your office with Royal Electrics. And when you find they have more time for non-typing duties like filing and phone answering, your own job may be more pleasant.

Then you'll learn that the new Royal Electric has been rigorously tested for ruggedness . . . that its happy advantages go on year after trouble-free year. And you'll be thankful for the day you called your Royal Representative for a demonstration.

ROYAL®

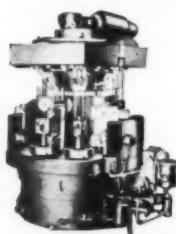
electric · portable · standard

Made by the World's Largest Manufacturer of Typewriters



Fall Foliage "The Color Line"

FPG Photo



Bullard Contin-U-Matic
Type "RD" with 4-6 and 12
Spindles in 10"-14"-20"

The Invisible Background

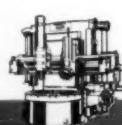
... of Industrial Progress ...

It is often said that the best things in life are free. Certainly the scenic joys provided by Mother Nature defy the greatest talents of man. Nothing is more awe-inspiring than a drive or trip over the highways and byways of our great land in the fall when Nature is in her fullest splendor. This is a privilege within the grasp of everyone.

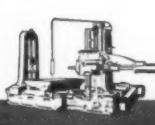
Manufacturers of transportation equipment such as automobiles, busses and railroad locomotives and cars; and manufacturers of road-building equipment including trucks, bulldozers, road rollers, road scrapers and mechanical shovels have recognized that Bullard *Modern Machine Tools* are efficient manufacturing units — the ultimate in their field — another example of "The Invisible Background of Industrial Progress."



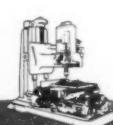
CONTINU-MATIC



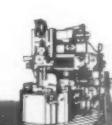
CUT MASTER



HORIZONTAL SORING



SPACING TABLE



MAIN-MASTER



MULTI-AUTOMATIC

THE BULLARD COMPANY • BRIDGEPORT 2, CONNECTICUT

Tri-Continental Readies New Preferred Issue

Tri-Continental Corp., closed-end investment trust with \$215-million of assets, has given its preferred stockholders the choice of (1) swapping each of their \$6 no-par shares for two new \$2.70, \$50-par shares, or (2) redeeming the stock for \$110.50 a share. (Current price on the New York Stock Exchange is about \$112 per share.)

Shareholders who make the swap will be getting only \$5.40 a year in dividends instead of the usual \$6 a year. Last March, 67% of Tri-Continental's preferred stockholders approved a new issue of preferred, with a lower dividend, although it was not known at that time exactly how much lower the dividend would have to be. Francis F. Randolph, Tri-Continental's president, pointed out then that the \$6 dividend was out of line with money market conditions generally. The company expects the new issue to save it \$243,222 a year, which will probably go to holders of common stock.

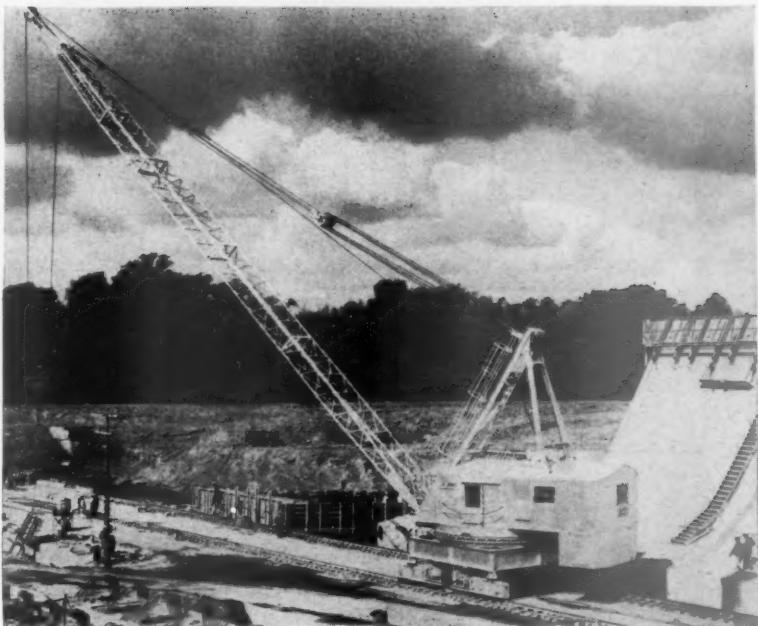
Shareholders who want cash for their preferred will have to pay tax on the deal if the redemption price is higher than the original cost of the stock.



Mortician for RFC

Laurence B. Robbins (left) will carry the title of Asst. Secy. of the Treasury while carrying through the gradual dissolution of the Reconstruction Finance Corp., one-time mammoth lending agency. He is shown being sworn in by Treasury Secy. George M. Humphrey, as Under-Secy. W. Randolph Burgess looks on. He had been acting as assistant to the Secretary.

Robbins, formerly vice-president of Chicago's Northern Trust Co., has been chipping away RFC's assets through sales of securities and collection of loans due the agency, with the proceeds going to the Treasury. At last count he still had \$283-million worth of assets to go, mostly in business loans.



Atop a 177,000-cubic-yard concrete spillway, an American Revolver Crane moves to another assignment. This giant workhorse is kept busy days on such tasks as handling huge concrete forms. By night, it pours heavy concrete mix on the dam.

Quenching a 20 billion gallon thirst

Men and equipment work night and day on the new Hoover Dam and Reservoir that will hold 20,000,000,000 gallons to satisfy the thirst of Columbus, Ohio. Backing up Big Walnut Creek, the structure will be 2,525 feet from bank to bank and will reach a maximum height of 115 feet.

It takes men with know-how and the best of equipment to face production schedules of this kind. In all, some 536,000 cubic yards of embankment are needed for the earthen wings. The concrete section is 680 feet long, with a maximum height of 90 feet.

At the heart of the heaviest work is an American Revolver Crane owned by the J. A. Jones Construction Company. Moving along tracks from one assignment to the next, the American's power, maneuverability and the "boardinghouse" reach of its boom have helped keep the project on schedule.

As always, on America's biggest and toughest jobs, you'll find American equipment. Many factual, on-the-job stories of how American equipment increases production and cuts costs for owners are described in the American Crosby Clipper. If your business is such that these stories are of interest to you, mail the coupon below. You will receive the Crosby Clipper regularly without charge.

American Hoist and DERRICK COMPANY

American Hoist & Derrick Company
St. Paul 1, Minnesota

Yes, I'd like to get the American CROSBY CLIPPER.
Also, send information on the following equipment:
— Hoists — Steel Derricks — Cranes — Portable Elevators
— Genuine Crosby Wire Rope Clips

Name Title

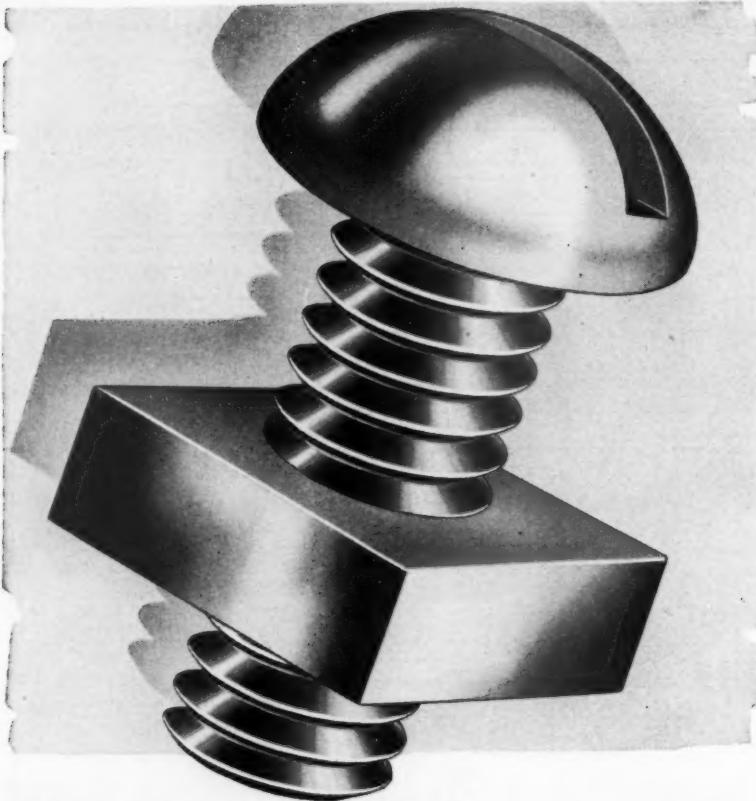
Firm

Address

City Zone State



Send coupon today!



What's so "Special" about this "Standard"?

This is an ordinary stove bolt—A "Standard" fastener in the jargon of the bolt and nut industry.

But there's something "special" about it, too. That something "special" has to do with the many extra values Lamson & Sessions offers its customers over and above high product quality.

For instance, behind every Lamson fastener are research facilities and engineering talent unexcelled in the industry.

There's a practical, workable "Statistical Quality Control" system upon which you can depend.

There's an awareness on our part that the customer deserves the best in efficient service . . . minus costly mistakes in fulfilling specifications or shipping.

Finally, there's that feeling of confidence our customers enjoy, based on Lamson's 88-year reputation for fair and honest dealing.

These are just a few of the "specials" Lamson & Sessions delivers to its customers . . . even when they buy "Standards".

The home of "quality controlled" fasteners



The **LAMSON & SESSIONS CO.** • General Offices: 1971 W. 85th Street, Cleveland 2, Ohio
Plants at Cleveland and Kent, Ohio • Birmingham • Chicago

Do-It-on-Cuff

Installment sales for do-it-yourself-tools, paint, even lawn mowers—are planned by hardware men.

Lawn mowers and financing might seem to have little in common. But it may not be long before you will be able to step into a hardware store in almost any city and buy not only a power lawn mower but power tools, paint, and other items on the installment plan.

A 12-man committee of the National Retail Hardware Assn. is meeting in Indianapolis this month to work out final details of a dealer education program to sell hardware men on the advantages of going into time sales.

Right after the turn of the year, the association's 23,000 members will receive a kit that they may use to set up their own credit departments. The kit will include instructions for selling on an installment loan basis, sample book-keeping equipment.

• **Banks to Help**—The association figures that about half of the nation's retail hardware stores are financially solid enough to handle time sales without financial assistance. Others will need credit lines. The instructions will tell them how to go about getting the required help from the 17,000 commercial banks in the cities where association members are located.

The plan for a local bank tie-up to put over the time sales project was arrived at as the best method, after a study of many other plans, according to Russell R. Mueller, managing director of the NRHA.

The hardware retailer will borrow capital from his local bank when necessary to set up the budget (time) selling plan, but the store will handle everything from then on. The bank will have no dealings with the customer.

• **Boost**—Mueller sees the installment plan giving a big boost to retail hardware sales, which currently total around \$24-million annually. He forecasts a jump above the \$3-million rate within 18 months, perhaps up to \$4-billion annually within five or six years.

The NRHA looks particularly for a push in sales of do-it-yourself items. Take the man who wants to paint his house. If it's average size, he'll need at least 20 gallons of paint, besides brushes, maybe a ladder. That's quite an outlay in one clip.

Most hardware customers are good credit risks, according to NRHA; the average customer is around 40 years old, and able to shell out cash on big-ticket items. But the plan's backers think he'd buy a lot more on credit.

or do-
even
united

might
But it
be able
almost
er lawn
d other

National
ing in
ork out
on pro-
the ad-
s.

ear, the
will re-
set up
The kit
ing on
the book-

on fig-
s retail
solid
without
I need
ill tell
the re-
commercial
ciation

-up to
was ar-
after a
ording
direc-

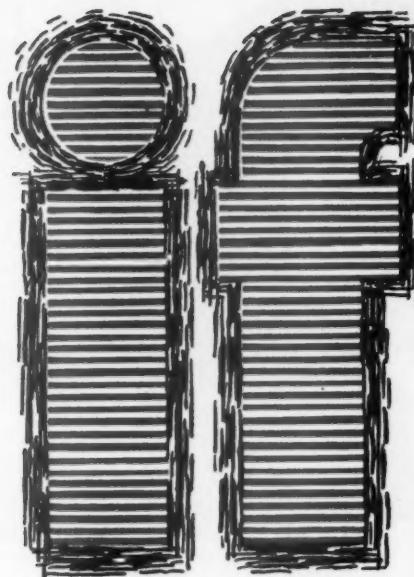
borrow
necess-
selling
every-
ll have

llment
hard-
round
casts a
within
billion

for a
items.
nt his
need
besides
quite

good
A; the
rs old,
ticket
k he'd

9, 1954



you need absolute dependability . . . you need ADLAKE Mercury Relays!

Because they're designed and built to meet the most exacting needs of industry...in jobs that conventional relays can do in an uncertain manner at best...ADLAKE Mercury Relays have won a reputation for *absolute* dependability! And no wonder, because each ADLAKE Relay offers:

Positive leak-proof sealing—assured by the use of properly selected metals and glass components with properly matched thermal expansion characteristics.

Liquid, mercury-to-mercury contacts—completely eliminate failures caused by low contact pressure, contact burning, pitting and sticking. And the inherent high surface tension of mercury imparts an ideal snap action to the contacts.

Arc-resisting ceramics—used to reduce any destructive effect caused by the arc.

Yes, as thousands of enthusiastic users in every branch of industry know, ADLAKE means dependability every way! Write for your free copy of the ADLAKE Relay catalog today. The Adams & Westlake Company, 1178 N. Michigan, Elkhart, Indiana. In Canada, write PowerLite Devices, Limited, of Toronto.

**EVERY ADLAKE RELAY IS TESTED
—AND GUARANTEED
—TO MEET SPECIFICATIONS!**



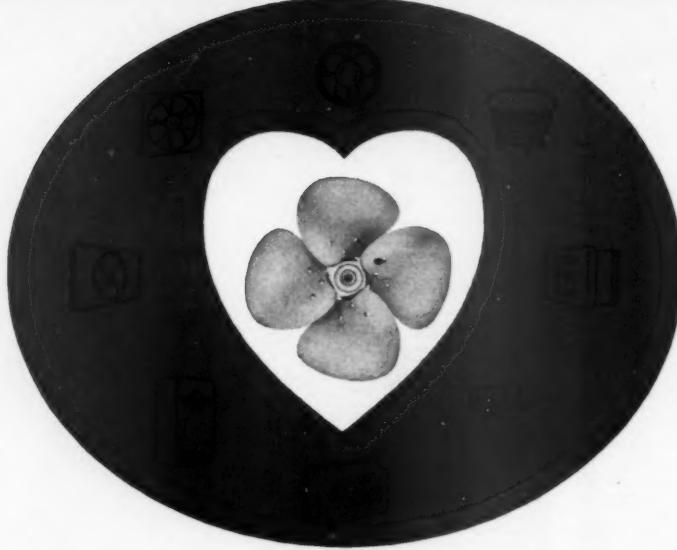
Type 1200 Load Relay
for D. C. energization
—Contact normally
Open or Closed.

THE Adams & Westlake COMPANY

Established 1857 • ELKHART, INDIANA • Chicago • New York

Manufacturers of ADLAKE Hermetically Sealed Mercury Relays





the heart of the matter

At the heart of modern air-moving equipment you'll find fan blades and blower wheels engineered and produced by Torrington. A pioneer in the development of air impellers, Torrington products are used everywhere throughout the air-moving industry and have come to represent the highest possible standards in efficiency, uniformity, sturdy construction and quiet operation.

Manufacturers find expert assistance on any design problem concerning air flow, sound and vibration at Torrington's modern research laboratory. This unique research service has helped a long list of manufacturers improve the performance and sales curve of their products *without cost*.

If you make or plan to make heating, ventilating or air conditioning equipment, put Torrington to work for you. No one has more experience in the design and production of air impellers than Torrington.

THE
TORRINGTON
MANUFACTURING COMPANY
TORRINGTON • CONNECTICUT
VAN NUYS, CALIFORNIA • OAKVILLE, ONTARIO

AIR IMPELLERS

FINANCE BRIEFS

The New York Central may drop its elaborate plans for "piggy-backing" truck trailers with specially designed two-trailer flatcars. The reasons, according to some observers: the road's \$6.2-million deficit for the first eight months of 1954, and the heavy cost of completing piggyback facilities.

Business loans dipped by \$13-million in New York for the week ended Sept. 29. They had dropped \$14-million the week before, are off \$14-billion so far this year. Thus New York banks, except for the mid-September rise due to tax borrowing, are still running counter to the strong seasonal upswing elsewhere throughout the country (BW—Sep. 25 '54, p 50).

Consumer installment debt rose \$64-million in August, to \$21.3-billion, according to the Federal Reserve Board. It was the third straight monthly rise. The biggest jump came in auto paper, up \$55-million, with finance companies still increasing their share against the commercial banks (BW—Oct. 2 '54, p 120).

The Treasury says many subscribers to its recent 1 1/8% note issue will get only half of what they subscribed, because of the heavy oversubscription (BW—Oct. 2 '54, p 122). Subscribers to less than \$50,000 of the three-year notes will get all they sought; those who asked for more than \$50,000 worth will get some part of their subscription, though not less than \$50,000.

L. M. Cassidy, board chairman of Johns-Manville Corp., announced that the company anticipates 1954 sales close to last year's \$253-million, and around 90%-95% of 1952's record. First-half sales were \$116.7-million.

New England Electric System's offering of 910,883 shares of common stock is being underwritten by a syndicate headed by Blyth & Co., Lehman Bros., and Bear, Stearns & Co. The new stock will be offered to present holders of common for \$15 a share at a ratio of one new share for each 10 held.

Allegheny Ludlum Steel Corp. expects a rise in earnings for the fourth quarter of this year, although it doubts it will make its annual \$2 dividend. E. J. Hanley, president, estimates capacity will stay between 60% and 70% through the final quarter, with dollar volume for the year running at a \$160-million rate.

drop its
acking"
designed
accord-
s \$6.2-
months
f com-

lion in
pt. 29.
e week
ar this
except
to tax
inter to
ewhere
Sep. 25

the \$64-
on, ac-
Board.
y rise.
paper,
ompa-
against
2.54,

ers to
t only
use of
Oct. 2
\$50,-
et all
more
the part
less

ohns-
the
close
ound
half

ering
ck is
icate
ros.,
stock
s of
o of

pects
arter
will
Han-
will
ough
ume
illion

1954



B-47 leaving Boeing's Wichita (Kan.) plant

BOEING AIRPLANE COMPANY, whose plants in Wichita, Kansas and Seattle, Washington turn out the newest in multi-jet planes, is one of the many users of Private Wire Services in the aircraft industry. For Boeing, Western Union's system handles a heavy two-way volume of reports, instructions, orders and specifications... permitting closer control of production schedules by this continuous, direct communication.



New Sears store, Casper, Wyo.

SEARS, ROEBUCK AND CO., like many other retailers, use a Private Wire System to maintain contact with their branch stores... particularly those located in the new, suburban shopping centers. With stores from coast to coast, Western Union's system for Sears permits branch stores not only to exchange information with headquarters and warehouses but also with each other.



County Trust Drive-in Branch, White Plains, N.Y.

COUNTY TRUST COMPANY of White Plains, N.Y. with 24 branches throughout Westchester County, uses a special Facsimile Private Wire called *Intrifax*® to verify signatures and exchange other information. Used by many other banks, *Intrifax* permits a County Trust depositor to present his check at any branch. His signature is checked with the central bookkeeping office via *Intrifax*, and returned all in a matter of minutes... giving the customer better service and the bank a permanent record.



Lobby, Benjamin Franklin Hotel, Seattle, Washington.

WESTERN HOTELS, INC., is one of many hotel chains who use Private Wire Services to speed the handling of reservations. Their system connects 22 hotels in 16 cities from Vancouver to Los Angeles, to Denver, flashing all types of information such as reservations and credit data from one hotel to another in seconds. This high speed network permits faster service with a corresponding increase in the volume of reservations that can be handled.

FREE BOOKLET tells what you should know about Private Wires and their application to modern business.



WIRE COLLECT
FOR YOUR
COPY TODAY.

Just hand
this text
to your
secretary.

WESTERN UNION
COLLECT

PRIVATE WIRE SERVICES, DEPT. B 10
WESTERN UNION TELEGRAPH CO.
60 HUDSON STREET, NEW YORK, N.Y.

Please send, without obligation,
copy of Private Wire Booklet.

Name _____

Company _____ Title _____

Address _____

City _____ State _____

WHO USES WESTERN UNION PRIVATE WIRE SYSTEMS?

Thousands of firms, of all sizes, in all lines of business and industry use Western Union Private Wire Systems. Each of these systems is a complete, private telegraph network, custom-designed to answer the exact communication needs of the company it serves.

If you are currently spending more than \$75 a month for communications, both oral and written, between any two points...

Ask yourself these questions:

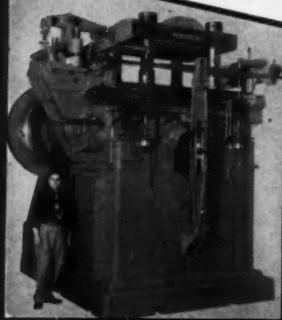
- Do we need a permanent, printed record of incoming and outgoing communications...
- Would instantaneous, continuous contact between any two or more points—branch offices, warehouses, plants, etc... add to the efficiency of present operation...
- Has our business followed today's trend toward "decentralization"—spreading operations over a broader area...

- As in all other business purchases, do we want to take advantage of volume rates—this time in COMMUNICATIONS...

If your answer to any of these questions is "yes", you should investigate the efficiency and economy of a Western Union Private Wire System. For more information on what such a system can do for your business, send for "What You Should Know About Western Union Private Wire Services," a booklet covering all types and applications of private wire communications. No cost or obligation.



WHERE IS THE FAMILY RESEMBLANCE?



H&W 350-ton Dieing Machine



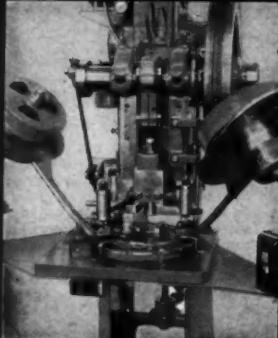
Pallet

WHEN ONE COMPANY OFFERS SUCH DIVERS
MUST BE A FAMILY RESEMBLANCE
IS DESIGNED TO USE THE MINIMUM
TIME, LABOR, SUPERVISION
LEARN MORE BY SENDING FOR

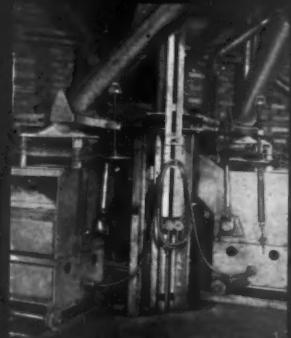
S-K Milk Caser

V&O inclinable presses

H-E "I.S." forming machine



Hopper-fed V&O press

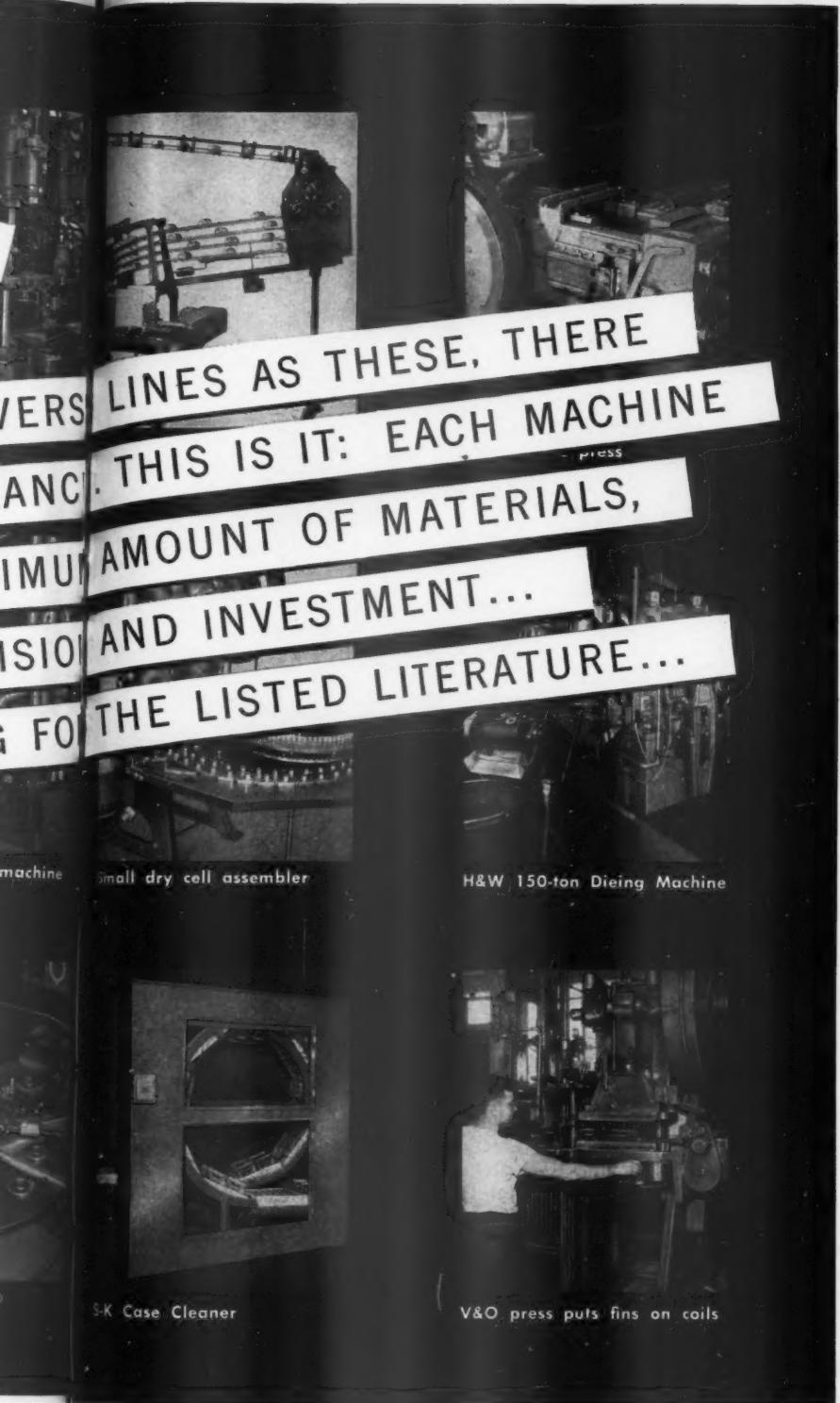


H-E Glass Batch Charger



V&O "Feed-O-Matic"

EMHART MFG. CO.



VERS LINES AS THESE, THERE
ANC. THIS IS IT: EACH MACHINE
IMU AMOUNT OF MATERIALS,
ISIO AND INVESTMENT...
G FOR THE LISTED LITERATURE...

Only the best is good enough

NEW LITERATURE

Check any product information you want and mail this coupon to any Emhart unit listed below . . .

- HENRY & WRIGHT**

 Division of
 Emhart Mfg. Co.
 510 Windsor Street
 HARTFORD 5, CONN.
- HARTFORD-EMPIRE CO.**

 Division of
 Emhart Mfg. Co.
 HARTFORD 2, CONN.
- THE V & O PRESS CO.**

 Division of
 Emhart Mfg. Co.
 400 Union Turnpike
 HUDSON, NEW YORK
- STANDARD-KNAPP**

 Division of
 Emhart Mfg. Co.
 PORTLAND, CONN.

GLASS

- Batch Chargers
- Forming Machines
- Feeders
- Lehr Loaders
- Lehrs
- Unit Melters

PACKAGING MACHINES

- Unloaders
- Packers
- Rinsers
- Labelers
- Cartoners
- Case Cleaners
- Gluers & Sealers
- Palletizers & De-palletizers

METAL WORKING

- Henry & Wright Dieing Machines
- Henry & Wright "Press Load Calculations"
- Henry & Wright Case Histories
- V & O Inclinable Presses
- V & O Notching Presses
- V & O Roll and Dial Feeds
- V & O Feed-O-Matic

NAME _____

TITLE _____

COMPANY _____

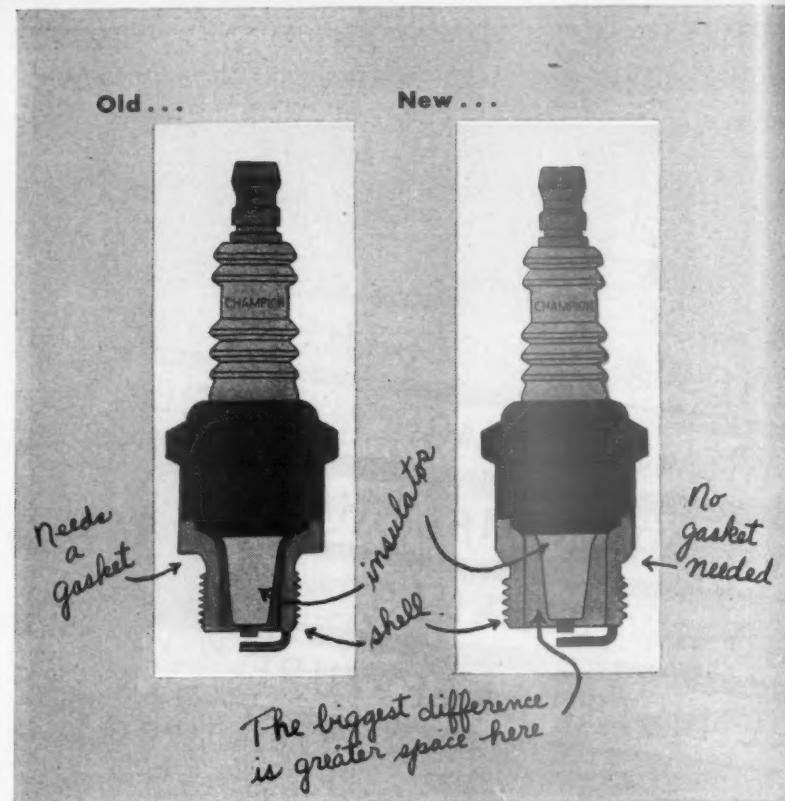
ADDRESS _____

CITY & STATE _____

COMPANIES



R. A. STRANAHAN and his Champion Spark Plug Co., which scorns to make any product but the one in its name, have developed a new sparkplug (right). It wards off the maladies that prey on standard plugs. Many cool-headed observers call it revolutionary. Here is the story of Champion and . . .



The Long-Lived Sparkplug

For nearly 20 years, sparkplugs measuring 14 mm. across the base have been standard in the U. S. automobile industry. This week, Champion Spark Plug Co. released details of a new plug with a new size—18 mm.

Champion's engineers call their new plug revolutionary. The opinion is probably quite justified.

• Witnesses—In any industrial field that has become used to working with certain parts in certain standard sizes, a manufacturer has to be pretty sure of his thinking before he puts out a part not of standard size. He has to be sure his new part's advantages are big enough to outweigh the fact that it is a maverick. He has to be sure his customers will want the part badly enough to re-engineer their products for it.

Champion is sure its new sparkplug will make the grade. And Champion should know. It has been making sparkplugs since 1920. It makes more of them than all other U. S. companies combined, and it makes nothing else—only sparkplugs. You can safely assume that its latest move is backed by the thinking of many highly experienced men.

Furthermore, the 18-mm. plug al-

ready has a customer, and a big one—Ford Motor Co. It was Ford that originally induced Champion to develop a wider-based plug. And it will be Ford whose cars first use the new plugs. Champion's 18-mm. product will go to work in all Ford's 1955 lines.

Champion expects other auto makers to follow Ford's lead—perhaps in their 1956 models. If this happens on a big scale, it will mean some important changes not only for Champion and its competitors, but also for other segments of the auto industry—including the corner garage. A sparkplug can be bigger than it looks.

I. The Difference

Like many other small parts of an auto engine, a sparkplug can proudly and truthfully state that the engine couldn't get along without it. The business end of a sparkplug consists of two electrodes, a few hundredths of an inch apart. The sparkplug is screwed into an engine cylinder so that the electrodes project into the combustion chamber. When high-voltage current is passed through the plug, a spark jumps the gap between the electrodes. This ignites the

gases in the chamber—causing the explosion that powers the car.

Unfortunately, simple though it is, a sparkplug is prey to two distressing maladies that can do anything from reducing a car's power to paralyzing it completely. The maladies:

Fouling: When a car's engine is running slowly—for instance, during a drive through suburban streets—the firing end of the sparkplug is too cool to burn off all the combustion deposits that continually form on it. These deposits build up around the firing end, and the result is that the plug eventually misfires. When sparkplugs run into this trouble, the engine becomes hard to start, balky, sluggish—or altogether dead.

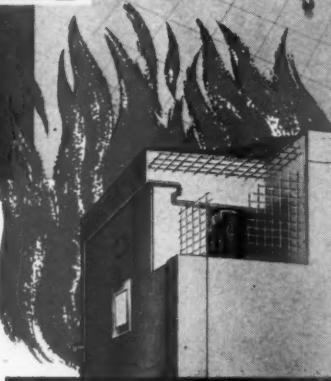
Pre-ignition: On the other hand, the sparkplug can also cause trouble when it becomes too hot. This kind of trouble is particularly widespread in modern high-compression engines. When the firing end of a plug gets hotter than it should be, it can ignite the gas in the combustion chamber before the spark comes. The ignition system of an auto engine is worked out so that the explosion in each cylinder occurs at a precise moment in a carefully arranged cycle. If the explosion in any cylinder

Save steps, hours- *and maybe your business**



*Fire can't burn any of the records in this office

...ALL ARE PROTECTED BY UNDERWRITERS' LABELS



EACH DRAWER A SAFE! In this modern, good looking Shaw-Walker fireproof equipment, fire walls stand between your irreplaceable records and possible destruction. Fire-File, with corner cut away shows: Thick, steel-walled steel-reinforced fire insulation on all six sides of each drawer. Vault-like interlocking drawer front.

YOU are looking here at no ordinary office scene. The difference is a new means of record keeping, now revolutionizing office methods—fire protection for all records *right where they are being used*.

This modern "time-engineered" Shaw-Walker equipment not only gives right-on-the-job fire protection during working hours when most fires (55%) occur, it pays for itself by saving time and space. All of the savings from this efficiency go directly into profits.

Shaw-Walker makes 46 different types of this time-saving, fireproof equipment—Desks, Fire-Files, Post-ing Trays. In them your records will be completely safe, always ready for instant use, even after a fire. You can't afford to gamble—57% of the businesses who lose records in fires never fully recover.

Shaw-Walker has been helping American business save time and step up office output since 1899. There are 4,000 Shaw-Walker products—chairs, desks, filing cabinets, Fire-Files, loose-leaf and payroll equipment—every-

thing for the office except machines—each "time-engineered" for the needs of every job and worker.

So if you are modernizing or setting up a new office, make sure you use Shaw-Walker throughout. It will help you stretch time—the most critical factor in business today. It *may* save your business!

THE BOOKLET, "TIME AND OFFICE WORK" is packed with ideas for stretching office time. A wealth of information on "time-engineered" office systems and equipment. 36 pages! Many color illustrations! Write today, on business letterhead to: Shaw-Walker, Muskegon 11, Michigan.



SHAW-WALKER

Largest Exclusive Makers of Office Furniture and Filing Equipment in the World
Executive Offices at Muskegon, Michigan—Branches and Exclusive Dealers in All Principal Cities



as near as your 'phone!

Unexpected guests? Your car "on business", or laid up? Whenever you need an extra car, call your local NATIONAL member (listed in your telephone directory). "Your car" will be ready for you—a clean, late model that you'll drive proudly and economically! Write for a pocket directory and National Courtesy Card, today!

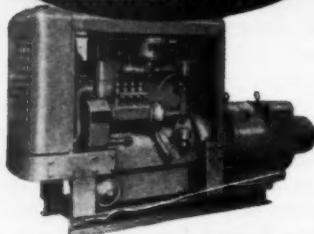
CAR RENTAL OPERATORS: A few choice locations open for NCRS franchise, write:

NATIONAL
CAR RENTAL SYSTEM, INC.
1209 WASHINGTON AVE., ST. LOUIS 3, MO.

Complete
Protection Against
HIGHLINE POWER FAILURE
in the critical fields of
Electronics and Communications

Automatically Controlled

Sheppard
DIESEL
GENERATING SETS



Sheppard Diesels are used for stand-by to level off "dips" in highline voltage. In remote stations, 2 or more Sheppards often supply both main and stand by power, operating continuously unattended for months at a time. Sheppard is preferred for this critical service because simplified design results in greater operating dependability.

SEND FOR
FOLDER

It shows why Sheppard Diesels are best for stand by power . . . fully describes various types of automatic controls. Write today.

Sheppard Diesels • Hanover, Pa.

comes too early, the car loses power and the engine mechanism takes a terrific beating.

• Newcomer—Champion's new sparkplug is designed to forestall both fouling and pre-ignition. Its name, Turbo-Action, suggests some of the thinking behind it.

The drawings on page 86 show what that thinking was. With 4 mm. of extra diameter, the Turbo-Action plug allows for more space between the inside of the sparkplug shell and the insulator. Turbulent fuel gases can wash around better in this bigger space, and can burn in it more completely. This cuts down the buildup of combustion deposits. Furthermore, the bigger space has more tolerance for deposits; being bigger, it can accept a relatively large amount of deposits without causing the sparkplug to lose efficiency. All this forestalls fouling.

The bigger space wards off pre-ignition, too. Fuel injected into the cylinder after each explosion swirls around the firing end of the sparkplug and cools it off. When the fuel has more room in which to circulate, it can do this cooling job better.

Champion's new sparkplug has yet another advantage over its 14-mm. cousins. It is designed so that it can screw into a cylinder more easily and surely.

A sparkplug has to be tight in the cylinder; otherwise, the hot gases of the fuel explosions leak out around it. Standard plugs are made tight by use of a gasket—generally a copper one. This system sometimes leads to trouble. Engineers who design car motors know exactly where they want the spark in the combustion chamber to occur. But the spark doesn't always occur just there. The copper gasket is compressible; sometimes the sparkplug is wrenched down too hard on it, sometimes not hard enough. Sometimes amateur repairmen leave the gasket off entirely.

Champion gets around this trouble neatly by omitting the gasket. The new sparkplug is designed to work without one; it is almost impossible to position it wrong.

• Tests—Both Champion and Ford have tested the 18-mm. sparkplug thoroughly. The companies are sure it's what they want.

According to Champion, road tests have shown that a standard 14-mm. plug is likely to begin giving trouble after it has worked for about 1,500 miles. An 18-mm. plug, the company says, can go for 5,000 miles before it begins misfiring or pre-igniting.

II. Strong and Silent

Two weeks ago, Champion held a big party at its Toledo headquarters plant to introduce the Turbo-Action plug to

the press. The party included, as part of the entertainment, a tour through the big five-story plant. To many of the reporters present, the party and tour were as much of a surprise as the 18-mm. sparkplug itself, for Champion had never before opened its plant to such a press group. Champion, throughout its history, has had a reputation for keeping its thoughts pretty much to itself.

It is a privately owned company. Its president is 68-year-old Robert A. Stranahan (picture, page 86)—usually called R. A. He is undisputedly the firm's top man, and he still takes a vigorous interest in company affairs; but Champion's day-to-day operations are managed by a three-man executive committee with an average age of 45. All of the three are members of the Stranahan family.

Champion is the world's biggest maker of sparkplugs. Its chief competitors are AC Spark Plug Div. of General Motors Corp. and Electric Auto-Lite Co. Among them, the three companies produce some 90% of all sparkplugs. Champion is far out in front; it makes more sparkplugs per year than the other two combined.

Nobody but Champion's executives and owners can do more than guess at its production and sales figures. One estimate is that the company made some 220-million sparkplugs last year, for about \$100-million in gross sales.

• The Spark—The company was born early in the century. R. A. Stranahan graduated from Harvard in 1908, after 2½ years of study. He had with him a Phi Beta Kappa key and an interest in auto engines, and with these he went to work at an auto accessory wholesale company in Boston, run by his brother, Frank D. (now vice-president and treasurer of Champion). R. A. had not been there long before he developed a new sparkplug that caught the fancy of John N. Willys, then head of Toledo's Overland Automobile Co. and one of the leading car makers of that time.

Willys agreed to put the new plug in his Willys-Overland cars if the Stranahan brothers would move their company to Toledo, thus giving Willys a source of supply close to home. The brothers agreed, and in 1910 they made their first plugs for Willys in the loft of a Toledo laundry. "By 1912," says R. A., "we had lined up the Big Four of that time—Maxwell, Studebaker, Ford, and Willys-Overland. We've never stopped growing." Champion now has three plants in the U.S., and is building a fourth. It has plants in four other countries.

• Strategy—Champion has managed to stay ahead in the sparkplug business, Stranahan says, because it has concentrated all its research and engineering talent on one product. Today, it makes

part
ugh the
he re-
er were
8-mm.
had
such
ghout
on for
to it-

ay. Its
rt A.
usually
ly the
a vige-
s; but
ns are
the com-
All of
anahan

biggest
mpeti-
General
to-Lite
panies
kplugs.
akes
the other

cutives
ess at
. One
made
t year,
sales.
s born
anahan
3, after
him a
rest in
went to
holesale
brother,
d treas-
ot been
a new
of John
s Over-
of the

plug in
Strana-
company
source
brothers
e their
ft of a
s R. A.,
of that
rd, and
stopped
s three
lding a
er coun-

aged to
business,
concen-
engineering
t makes



WHY YOU CAN RELY ON

Dearborn

Since 1887 Dearborn has been combating corrosion wherever it exists . . . with water treatment, engineered equipment and supervisory service for boilers, power plants...with NO-OX-ID rust preventives for the protection of metal surfaces...with cleaners and detergents for railroad and industrial use. This extensive specialized experience—plus Dearborn's complete research and development facilities—is available to you.



Your Dearborn
engineer can
help you

DEARBORN CHEMICAL COMPANY • MERCHANDISE MART PLAZA • CHICAGO 54, ILLINOIS



as near as your 'phone!

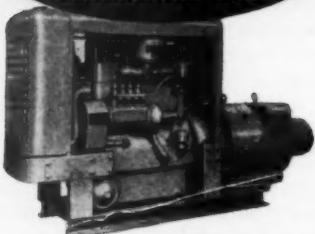
Unexpected guests? Your car "on business", or laid up? Whenever you need an extra car, call your local NATIONAL member (listed in your telephone directory). "Your car" will be ready for you—a clean, late model that you'll drive proudly and economically! Write for a pocket directory and NATIONAL Courtesy Card, today!

CAR RENTAL OPERATORS: a few choice locations open for NCRS franchise, write:

NATIONAL
CAR RENTAL SYSTEM, INC.
1209 WASHINGTON AVE., ST. LOUIS 3, MO.

Complete
Protection Against
HIGHLINE POWER FAILURE
in the critical fields of
Electronics and Communications

Automatically Controlled
Sheppard
DIESEL
GENERATING SETS



Sheppard Diesels are used for stand-by to level off "dips" in highline voltage. In remote stations, 2 or more Sheppards often supply both main and stand by power, operating continuously unattended for months at a time. Sheppard is preferred for this critical service because simplified design results in greater operating dependability.

SEND FOR
FOLDER

It shows why Sheppard Diesels are best for stand by power... fully describes various types of automatic controls. Write today.

Sheppard Diesels • Hanover, Pa.

comes too early, the car loses power and the engine mechanism takes a terrific beating.

• Newcomer—Champion's new sparkplug is designed to forestall both fouling and pre-ignition. Its name, Turbo-Action, suggests some of the thinking behind it.

The drawings on page 86 show what that thinking was. With 4 mm. of extra diameter, the Turbo-Action plug allows for more space between the inside of the sparkplug shell and the insulator. Turbulent fuel gases can wash around better in this bigger space, and can burn in it more completely. This cuts down the buildup of combustion deposits. Furthermore, the bigger space has more tolerance for deposits; being bigger, it can accept a relatively large amount of deposits without causing the sparkplug to lose efficiency. All this forestalls fouling.

The bigger space wards off pre-ignition, too. Fuel injected into the cylinder after each explosion swirls around the firing end of the sparkplug and cools it off. When the fuel has more room in which to circulate, it can do this cooling job better.

Champion's new sparkplug has yet another advantage over its 14-mm. cousins. It is designed so that it can screw into a cylinder more easily and surely.

A sparkplug has to be tight in the cylinder; otherwise, the hot gases of the fuel explosions leak out around it. Standard plugs are made tight by use of a gasket—generally a copper one. This system sometimes leads to trouble. Engineers who design car motors know exactly where they want the spark in the combustion chamber to occur. But the spark doesn't always occur just there. The copper gasket is compressible; sometimes the sparkplug is wrenches down too hard on it, sometimes not hard enough. Sometimes amateur repairmen leave the gasket off entirely.

Champion gets around this trouble neatly by omitting the gasket. The new sparkplug is designed to work without one; it is almost impossible to position it wrong.

• Tests—Both Champion and Ford have tested the 18-mm. sparkplug thoroughly. The companies are sure it's what they want.

According to Champion, road tests have shown that a standard 14-mm. plug is likely to begin giving trouble after it has worked for about 1,500 miles. An 18-mm. plug, the company says, can go for 5,000 miles before it begins misfiring or pre-igniting.

II. Strong and Silent

Two weeks ago, Champion held a big party at its Toledo headquarters plant to introduce the Turbo-Action plug to

the press. The party included, as part of the entertainment, a tour through the big five-story plant. To many of the reporters present, the party and tour were as much of a surprise as the 18-mm. sparkplug itself, for Champion had never before opened its plant to such a press group. Champion, throughout its history, has had a reputation for keeping its thoughts pretty much to itself.

It is a privately owned company. Its president is 68-year-old Robert A. Stranahan (picture, page 86)—usually called R. A. He is undisputedly the firm's top man, and he still takes a vigorous interest in company affairs; but Champion's day-to-day operations are managed by a three-man executive committee with an average age of 45. All of the three are members of the Stranahan family.

Champion is the world's biggest maker of sparkplugs. Its chief competitors are AC Spark Plug Div. of General Motors Corp. and Electric Auto-Lite Co. Among them, the three companies produce some 90% of all sparkplugs. Champion is far out in front; it makes more sparkplugs per year than the other two combined.

Nobody but Champion's executives and owners can do more than guess at its production and sales figures. One estimate is that the company made some 220-million sparkplugs last year, for about \$100-million in gross sales.

• The Spark—The company was born early in the century. R. A. Stranahan graduated from Harvard in 1908, after 2½ years of study. He had with him a Phi Beta Kappa key and an interest in auto engines, and with these he went to work at an auto accessory wholesale company in Boston, run by his brother, Frank D. (now vice-president and treasurer of Champion). R. A. had not been there long before he developed a new sparkplug that caught the fancy of John N. Willys, then head of Toledo's Overland Automobile Co. and one of the leading car makers of that time.

Willys agreed to put the new plug in his Willys-Overland cars if the Stranahan brothers would move their company to Toledo, thus giving Willys a source of supply close to home. The brothers agreed, and in 1910 they made their first plugs for Willys in the loft of a Toledo laundry. "By 1912," says R. A., "we had lined up the Big Four of that time—Maxwell, Studebaker, Ford, and Willys-Overland. We've never stopped growing." Champion now has three plants in the U.S., and is building a fourth. It has plants in four other countries.

• Strategy—Champion has managed to stay ahead in the sparkplug business, Stranahan says, because it has concentrated all its research and engineering talent on one product. Today, it makes

as part
ugh the
the re-
ur were
8-mm.
a had
o such
roughout
on for
a to it-

ny. Its
ert A.
usually
ly the
s a vige-
ers; but
ns are
e com-
All of
anahan

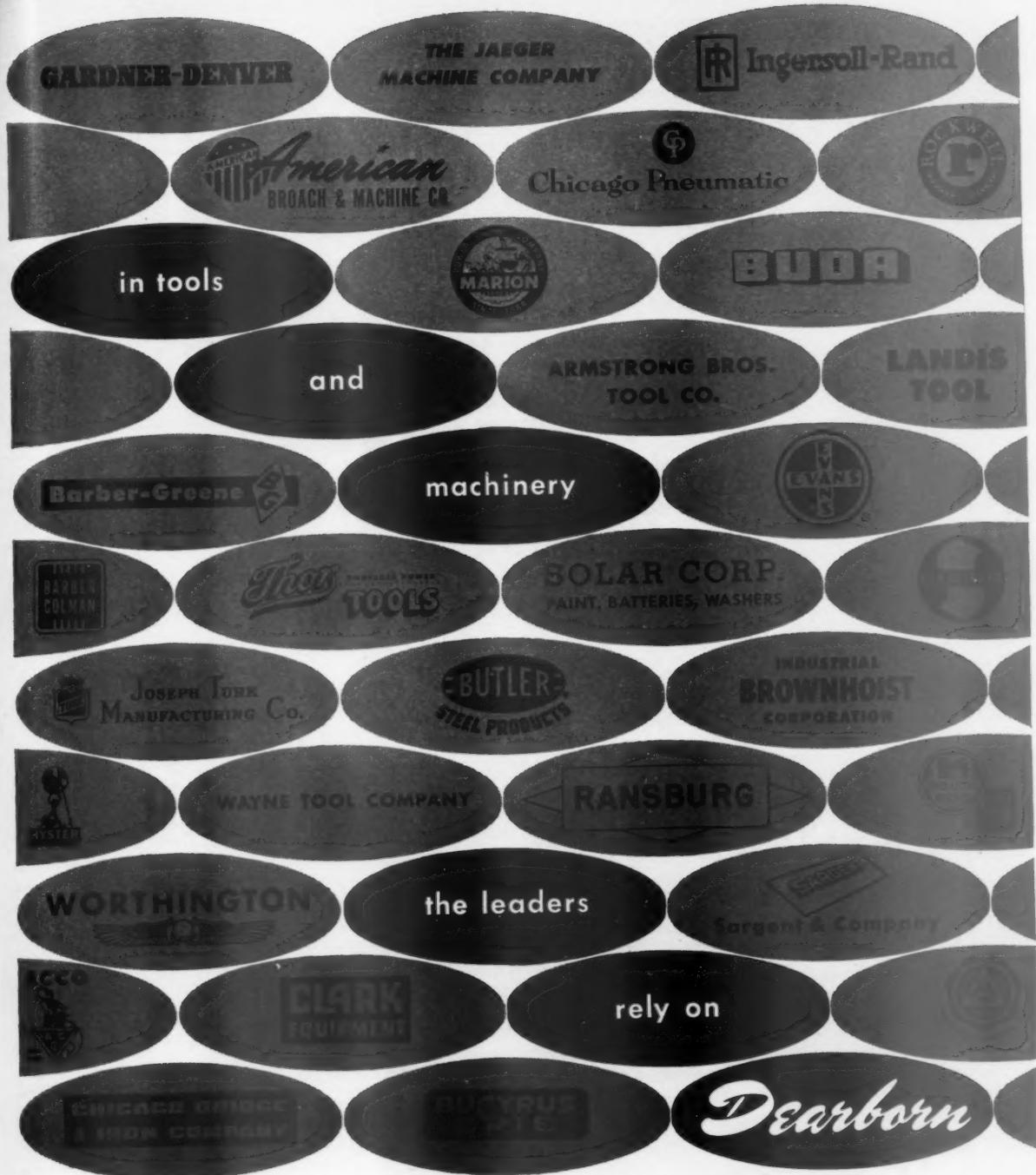
biggest
competition
General
to-Lite
kplugs.
makes
the other

ecutives
ess at
. One
made
ast year,
sales.
as born
anahan
8, after
him a
nterest in
went to
holesale
brother,
d treas-
ot been
a new
of John
s Over-
of the

plug in
Strana-
company
source
brothers
e their
ft of a
s R. A.,
of that
rd, and
stopped
s three
lding a
er coun-

aged to
business,
concen-
engineering
t makes

9, 1954



WHY YOU CAN RELY ON

Dearborn

Since 1887 Dearborn has been combatting corrosion wherever it exists . . . with water treatment, engineered equipment and supervisory service for boilers, power plants...with NO-OX-ID rust preventives for the protection of metal surfaces...with cleaners and detergents for railroad and industrial use. This extensive specialized experience—plus Dearborn's complete research and development facilities—is available to you.



Your Dearborn
engineer can
help you

DEARBORN CHEMICAL COMPANY • MERCHANTISE MART PLAZA • CHICAGO 54, ILLINOIS

**NOW! 20% less weight
25% more grinding power!**

Do grinding jobs faster, more accurately, reduce operator fatigue with this new Black & Decker 5" Portable Grinder. 4500 RPM. Splined gear mountings. Full size ball bearings insure long life. B&D-built motor designed *just* for tool. Housing designed to prevent clogging. Air exhaust directed away from operator. Only \$88.00. See your B&D Distributor for demonstration or write Dept. W10, THE BLACK & DECKER MFG. CO., Towson 4, Maryland.

See "Tools-Electric" in phone directory for

Black & Decker
PORTABLE ELECTRIC TOOLS

UNITABLE

BELT CONVEYOR

For Assembly - Inspection - Packaging

The most ADAPTABLE portable conveyor you can find. Exclusive "unitized" design 10' to 80' lengths. Write for UNITABLE Bulletin now.

**CONVEYOR
SPECIALTY
COMPANY INC.**
28 Newport Avenue
North Quincy 71, Mass.

"... it makes about 15,000 sparkplugs a month for Model T Fords . . ."

CHAMPION starts on p. 86

some 475 variations of 150 basic plugs—for all kinds of internal combustion engines powering anything from model airplanes to locomotives.

It keeps a careful eye on the replacement market—vastly important for Champion. Evidence of this is the fact that it makes an average 15,000 sparkplugs a month for Model T Fords still clattering around the countryside.

III. In the Industry

"We are convinced that the 18-mm. plug will be in general use in a few years," a Champion official said this week. What will this mean to Champion's competitors and the rest of the auto industry?

Competitors: Champion's attorneys doubt that the 18-mm. size itself can be patented; hence, it's likely that other sparkplug makers will eventually develop bigger-based plugs of their own. Champion believes it will still have the edge, however—partly because it has hit the market first, partly because it thinks it can patent the gasket-less seating arrangement if it should feel like doing so.

Detroit: For auto makers who decide to use the 18-mm. plug, there will be the need to adapt cylinder heads for the new size. Since Detroit makes changes in its cars every year, however, this should not prove much of a barrier for the Turbo-Action.

Dealers: Champion believes its new product will help cut the number of sparkplugs a parts dealer or repairman must keep in stock. Since the Turbo-Action works efficiently over a wider heat range, it doesn't have to be manufactured in so many variations as the 14-mm. plug.

Champion expects its new sparkplug to be in widespread use within a few years. But the company makes it plain that it doesn't intend to demote the 14-mm. plug in the Champion scheme of things—much less abandon it completely. The millions of cars now on the road use 14-mm. plugs, and will continue to need them as replacements for years to come. Even if every auto maker in the world were to switch to the 18-mm. size in 1956, there would still be a continuing demand for the older plugs—just as there is still a demand for Model T sparkplugs today.

To demonstrate its continued affection for the older plugs, Champion announced an improved 14-mm. sparkplug at the time it introduced the Turbo-Action.

5,000
for

p. 86

plugs—
ustion
odel

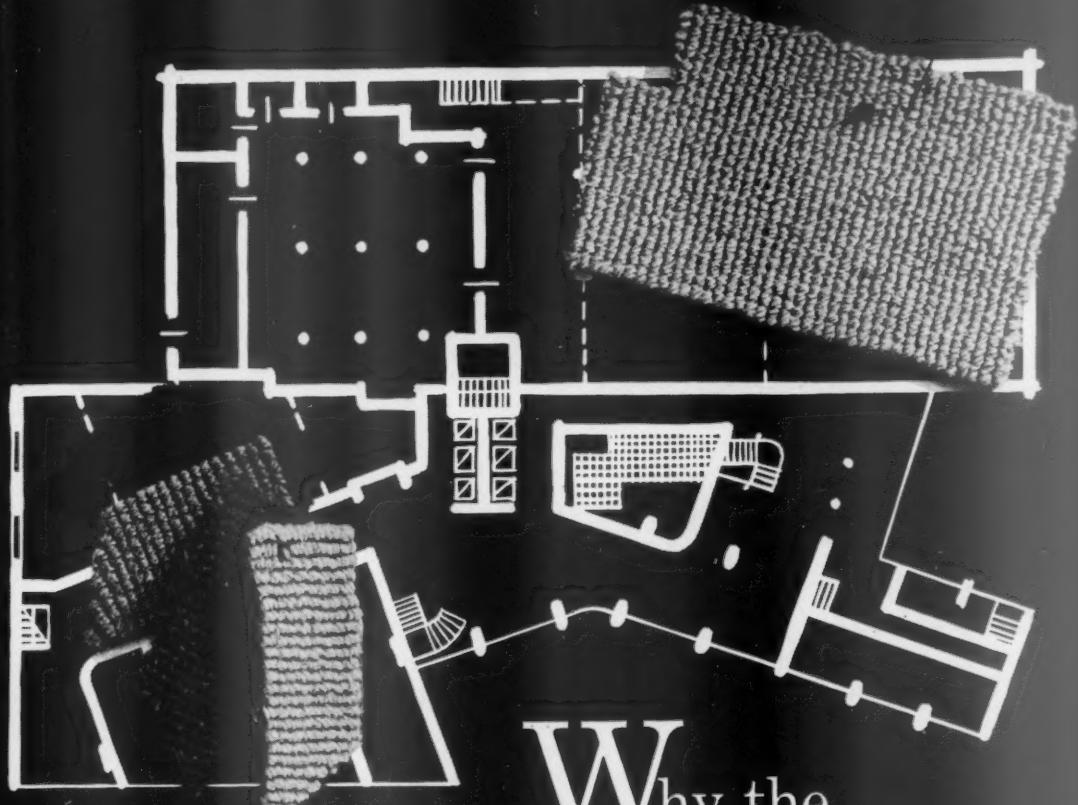
placement
for
the fact
the spark
s still

3-mm.
a few
1 this
Cham-
of the

orneys
if can
other
y de-
own.
re the
as hit
thinks
ng ar-
ng so.
decide
ill be
or the
anges
this
er for

new
er of
rman
turbo-
wider
manu-
s the

xplug
few
plain
the
heme
com-
w on
con-
s for
auto-
h to
ould
the
in de-
v.
affect-
an an-
spark-
the



Why the best-laid plans of architects include Bigelow Gropoint®

Before Gropoint, loop pile didn't have enough tuft bind to keep tufts from pulling out under the heavy abuse of commercial traffic.

Then along came Bigelow with its Lokweave® process to give loop pile the strongest tuft bind in the industry! The special compound applied to the back locks in every tuft and forms a selvedge on every edge. Woven or damaged parts may be removed and easily replaced.

Gropoint still holds the position it captured when first introduced: it remains the standard for store and office use.

Gropoint is an excellent example of Bigelow's unending research to produce carpets that lead in versatility and serviceability... the reason why Bigelow continues to be the number 1 name in carpets.

Bigelow



Number 1 name in Carpets

REAL ESTATE



When district manager Warner Banes (above) returns to his office in the Bermac Building, Houston, after a long trip, he knows he'll find his office work running smoothly—without an employee. He stops at the reception room for messages (above, right), then uses the building's unique facilities before going off on another trip.

A Bundle of Business Services for



TELETYPE is one of the building's services that Banes often uses.



ACCOUNTING is no worry for Banes. The building takes care of that, too.



DICTATING is convenient, with machines stationed around the corridors.



SECRETARIAL POOL is a godsend to one-man operators like Banes. A one-man office with one secretary is perpetually overstaffed for lulls, understaffed for a rush.

for One-Man Office



THE OFFICE, and all services, cost Banes \$300 to \$600 a month.

9, 1954

BUSINESS WEEK • Oct. 9, 1954

Warner J. Banes (pictures) is Southwest division manager for Union Barge Line Corp. and the one-man office staff of the company in Houston. His job calls for him to travel over a wide area. "I'm paid to drum up business, not sit around like a clerk taking orders," he says.

Thus, Banes faces the problem of all one-man offices: Who's going to take care of the office work while he's on the road? A full-time secretary isn't the answer. Banes tried that a few years ago and gave up in disgust. For one thing, when his girl was on vacation, out sick, or out for lunch, there was still nobody to answer calls. For another, Banes often has big rush-order jobs that one secretary couldn't begin to cope with.

For Banes, and others like him, Southwest Business Service is the perfect answer to the problem.

• **Package Deal**—Southwest Business Service operates a Houston office building with all the facilities a one-man office staff could want. The package is

**IF
IT'S
WATER...**



.... put all your eggs
in one basket!

Divided responsibility is dangerous—put all your eggs in one basket. Layne service is unique. From exploration through well drilling to the installation of Layne pumps, you do business with one organization that assumes complete and undivided responsibility.

Wise men know that on any question that relates to water—it's good business sense to talk first to Layne.

LAYNE & BOWLER, INC.
Memphis 8, Tennessee

**Water Wells
Vertical Turbine Pumps
Water Treatment**



*Layne Associate
Companies
Throughout
the World*



... and tell Millie I got hung up"

SMART BURGLARS steer clear of Cyclone Fence. That's the big reason why it is the most widely used property protection fence in the entire world.

You can buy cheaper fence than Cyclone, but it will cost you more in the long run. Cyclone gives full value for your dollar. Nothing but

brand-new, top-quality material is used throughout. The chain link fabric is woven from heavy steel wire and galvanized *after* weaving for greatest resistance to rust. Erection is handled by full-time, well-trained experts. Cyclone engineers will be glad to give you more information on your particular fencing problems.

CYCLONE FENCE DEPT., AMERICAN STEEL & WIRE DIVISION, UNITED STATES STEEL CORPORATION

WAUKEGAN, ILLINOIS • SALES OFFICES COAST-TO-COAST • UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS CYCLONE FENCE

Cyclone is the trade-mark name of fence made only by Cyclone. Accept no substitute.

FREE BOOKLET

Our informative booklet is filled with photographs, drawings and graphic descriptions of different styles of fence and gates for the protection of property. Whether you're interested in a few feet of fence or miles of it, you'll find this booklet worth your while. Send for your copy. It's free.

CLIP THIS COUPON — SEND IT TO —

Cyclone Fence, Waukegan, Ill., Dept. 4-104



Please mail me a free copy of your booklet.

Name.....

Address.....

City..... Zone..... State.....

UNITED STATES STEEL

"... the building's list of tenants is more impressive than its facade . . ."

BUILDING starts on p. 92

wrapped up in the Bermac Building, an unpretentious converted 13-room mansion a mile from Houston's downtown center.

The conversion was done so artfully that 61 offices were created in the 31,500 sq. ft. of floor space. Seventy-two companies, with 115 persons, are housed in this space. Most of the tenants are one-man businesses, factory representatives, division managers, and professional men. The list of tenants is more impressive than the facade. It includes such names as Davison Chemical Corp., Formica Co., Chase Brass & Copper Co., Inc., Chain Belt Co., Firemen's Mutual Insurance Co., Triangle Conduit & Cable Co., and Union Barge Line Corp.

Along with office or desk space goes a soup-to-nuts menu of business services: telephone answering, typing, filing, mailing, Mimeographing, and as much more as the tenant needs.

• Many Services—Each tenant is entitled to free parking space, storage of his dead files or supplies, telephone answering service, use of the reception room, and 10 hours of free office services, clerical work or typing.

The central reception room screens visitors, keeps them from barging directly into any of the one-man offices. Each tenant has his own telephone and number, but all calls come through the building's switchboard, answered with the tenant's company name. Switchboard operators take messages.

Other services include:

Stenographers. The building maintains a pool of 10 stenographers. It also keeps Dictaphone machines at convenient locations in the halls, three or four at each station. A tenant picks up one of the machines, dictates in the privacy of his office, returns the machine to its station, and leaves his dictation at the stenographers' room for transcribing. He can also dictate by telephone from outside the building; many tenants call long-distance to use this service.

Each company provides the stenographers with a supply of its own stationery, along with instructions about the style of letter that's preferred.

Communications. The building offers Western Union teleprinter, teletype, and messenger service; mail pickup and delivery (mail will be forwarded when requested); postage meter and mailing service. A letter-folding machine facilitates bulk mailings. The building staff will also wrap packages,

ist of
essive

n p. 92

building
13-room
s down-

artfully
in the
Seventy-
ons, are
of the
factory
ers, and
tenants
decade. It
Chem-
Brass &
o., Fire-
Triangle
n Barge

ce goes
ss serv-
g, filing,
s much

is en-
rage of
one an-
ception
ce serv-

screens
ing di-
offices.
one and
ugh the
ed with
Switch-

main-
It also
at con-
three or
icks up
in the
he ma-
his dic-
om for
state by
building;
to use

steno-
station-
ut the

ing of-
r, tele-
pickup
awarded
er and
ng ma-
The
ckages,

9, 1954

E.N.



CV



dynamics for defense

On April 30, 1954 the 31-year old Consolidated Vultee Aircraft Corporation became Convair — a division of General Dynamics.

Current programs include: for commercial transport — the famous Convair-Liner; for the United States Navy — the new supersonic delta-wing fighter "Sea Dart", the new vertically-rising "Pogo Stick", the new tank-carrying R3Y, 80-ton seaplane transport, and electronically guided missiles; for the United States Air Force — the new supersonic delta-wing F-102 interceptor, a new supersonic intercontinental bomber — and development of atomic propulsion for aircraft.

Since 1889 divisions of Dynamics have pioneered in hydrodynamics, electrodynamics, aerodynamics and nuclear dynamics. In 1954, under the group concept of "Dynamics for Defense" they continue to make new and notable contributions to the military security and industrial progress of the nation.

GENERAL DYNAMICS

DIVISIONS



GENERAL DYNAMICS CORPORATION • 445 PARK AVENUE, NEW YORK • PLANTS: GROTON, CONN.; BAYONNE, N.J.; POMONA-SAN DIEGO, CALIF.; DANGERFIELD-FT. WORTH, TEX.; MONTREAL, CANADA

How the G.T.M.

-anav

BLACK GOLD MINERS faced an endless problem in technical compounded V-belted drives on the mud pumps unusual draw works of their drilling rigs. Harnessing hundreds of horsepower under soaring shock loads, the G.T.M. constant misalignment, tremendous vibration and fan attacks of oil and weather proved too much for conventional belts. They often lasted less than the drill of a single well—about three weeks—then stretched apart or otherwise became useless. And the replacement plus the down-time involved was an expensive proposition.

TO MAKE MATTERS WORSE the constant demand for more speed and more economy in drilling was increasing the need for even bigger, tougher drives. What Y.T. V. do was the question put to the G.T.M.—Goodyear.

GOODYEAR INDUSTRIAL PRODUCTS
-Specified
HY-T V-Belts
for heavy-duty, high-shock-load drives

A. Multiple plies of chemically produced 3-T Cord, in neutral plane, carries a 40% greater horsepower load at speeds of 100 to 6000 feet per minute with practically no stretch—permits perfect matching.

B. Cushion section of durable rubber, especially compounded to give belt balanced construction.

C. Super-tough fabric cover is bias-cut, long-wearing, weather- and oil-resistant.

NOTE: Design shown applies only to HY-T V-Belts over 120" in length. Belts under 120" are of a single layer construction and are notched for cooler running under more severe flexing.

YOUR GOODYEAR DISTRIBUTOR can quickly supply you with Hose, Flat Belts, V-Belts, Packing or Rolls. Look for him in the yellow pages of your Telephone Directory under "Rubber Products" or "Rubber Goods."

GOODYEAR
THREE THREADS

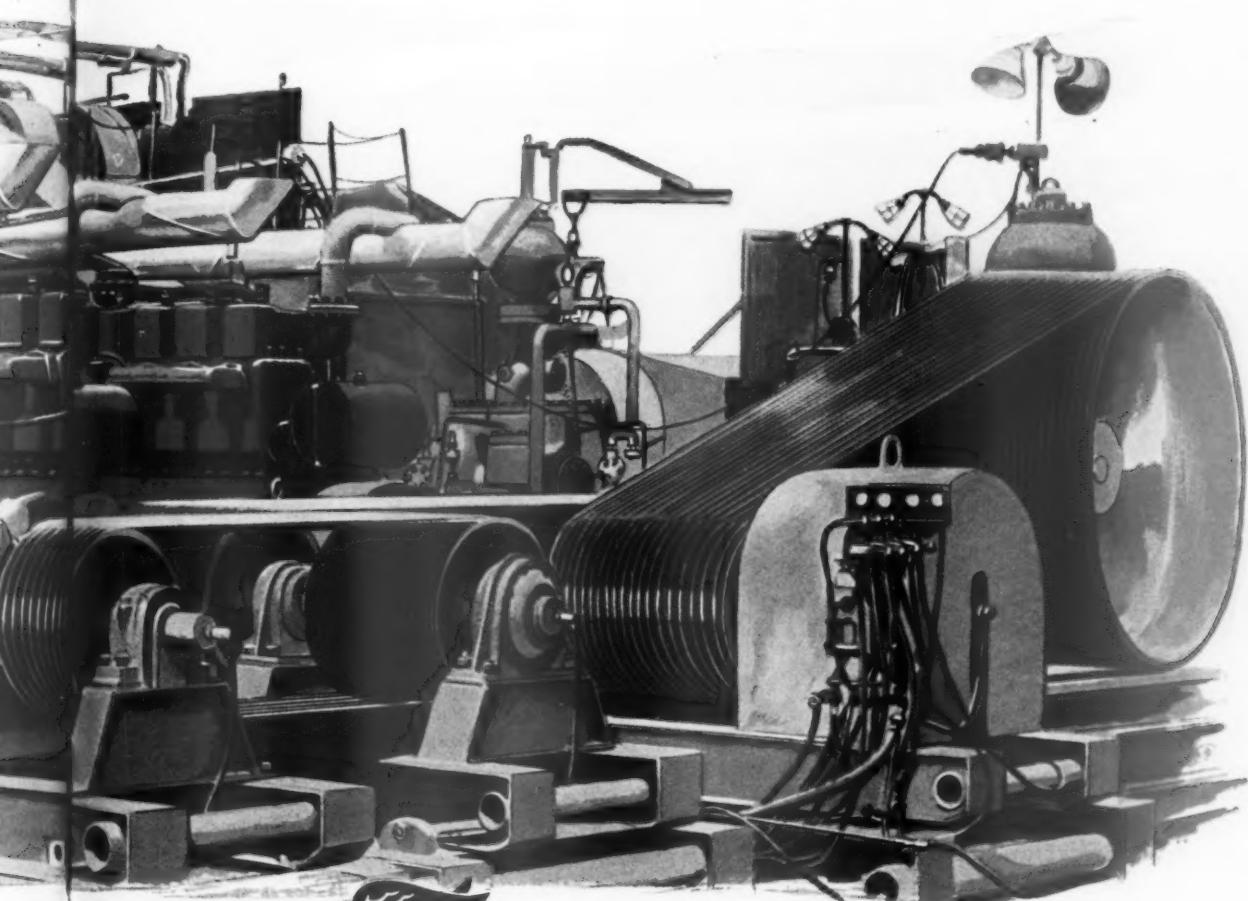
G.T.M. built a 3-T Cord V-belt —and saved a driller \$9000 per well!

problem in technical Man. A new kind of belt—one having pumps unusual strength plus a built-in cushion to absorb shock and vibration, yet quickly recover—was needed. Loads, the G.T.M. set out to build it. But it was lots tougher on and than it sounds.

much for **HEART OF THE PROBLEM** was the cord reinforcement which carries the load on a belt. Every known stretch of cord was tried, including the "miracle synthetics." All failed to give the exact balance of properties needed. That is, until the G.T.M. developed a triple-action tempering of synthetic cord involving demand, Temperature and Time which "set" it at its maximum strength and resilience. The resulting V-Belts, built with 3-T Cord, more than filled Goodyear bill.

SO STRONG AND SHOCK-RESISTANT are these super-belts that they permitted one driller to double the horsepower on his mud pump, cut drilling time by more than a week—save an average of \$9000 per well in operating expenses alone. And the same set of belts is still on the job after two years—drilling 5-6 wells per year—for a believe-it-or-not savings of \$100,000 plus, with more in store. On an even tougher draw works drive, HY-T V-Belts have rolled up a saving of over \$7000 on ten wells and are still going strong. What can they do for you? For details, see the G.T.M., your Goodyear Distributor or write:

Goodyear, Industrial Products Division
Akron 16, Ohio



GOOD  **YEAR**
THE **TEST** NAME IN RUBBER

We think you'll like
"THE GREATEST STORY EVER TOLD"—
every Sunday—ABC Radio Network—
THE GOODYEAR TELEVISION PLAYHOUSE
—every other Sunday—NBC TV Network

HY-T—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

World's Fastest Billing Machine ...

BURROUGHS

MIRACLE

MULTIPLIER



Computes and types the complete invoice in one continuous operation.

Computes by direct multiplication...not repeated addition.

Prints unit price and total amount simultaneously—no need for machine checking of quantities and price.

With the Burroughs Miracle Multiplier Typewriter-Billing Machine you save two steps out of three in your billing operations. Here's why—the usual steps of (1) calculating, (2) writing and (3) machine checking are reduced to calculating and writing in one single, continuous operation. Proved by use in thousands of businesses, the Burroughs Miracle Multiplier Billing Machine computes by direct mechanical multiplication, not repeated addition... writes and computes an invoice in less time than it would ordinarily take to copy it!

For important savings in your billing operations, get all the facts about the world's fastest billing machine from the Burroughs branch office near you. See the yellow pages of your telephone directory or write direct to Burroughs Corporation, Detroit 32, Michigan.

WHEREVER THERE'S BUSINESS THERE'S

Burroughs



"...the tenant doesn't have to pay for any service he doesn't use..."

BUILDING starts on p. 92

address cards, and send out large mailings. Last Christmas, it sent out 20,000 Christmas cards for tenants.

For tenants who have Addressograph plates, the building's service company will file the plates, keep them up to date, and run them off for mailings. It also does all kinds of duplicating, photostat, and blueprint work.

Business handling. This department literally keeps a tenant's business running in high gear while he's away. It keeps books, draws up billings and income tax returns, does accounting, keeps files and inventory records, opens mails, routes orders, quotes prices, follows up on shipments—in fact, anything a good assistant or top secretary might do. The accounting department now works for 26 tenants.

• **What It Costs**—Of course, some of these services cost the tenants a fee outside their monthly rent. For the basic rent—a private office, furnished and air-conditioned, runs from \$90 to \$120 a month—the tenant gets 10 hours of free office service. For office service beyond this amount, he is billed at a rate of about \$3 an hour; he also pays for actual cost of teletype, duplicating, photostat, and other services.

The average tenant incurs charges of \$40 or \$50 a month above his basic rent—but he doesn't pay for any service he doesn't use.

Warner Banes uses almost every facility the Bermac Building offers, but he regards the business handling service as the most vital. The building assigns one secretary to his Union Barge Line business, though she may also specialize in one or two other businesses. Mrs. Jeri Davis, who does the job now, sometimes takes as many as 50 calls a day for Banes. She has authority to quote prices, route orders, make reports to Banes's home office in Pittsburgh.

"My customers know Mrs. Davis so well now," says Banes, "that they often ask her even when I'm here."

Banes figures his monthly bill from Bermac, including rent, ranges between \$300 and \$600. "And when it hits \$600," he adds, "I'm tickled because I know I'm doing a hell of a lot of business."

• **Good Fellows**—Besides the unusual office services, which Banes calls "a life-saver in my business," Bermac Building offers a few extras that don't show up in the prospectus. The building has a coffee bar and lounge where the tenants get together. Only recently, the tenants fraternized on a boat trip down the



Industry Gets Rid of Public Relations Enemy No. 1

When last seen, this grimy looking character was being chased by a man-made bolt of lightning. That's how industry is getting rid of its No. 1 Public Relations Enemy—smokestack soot. Charges of high voltage current are applied to hot stack gases. Dust and ash particles are trapped before they go up the stack.

Today, more and more public relations conscious executives are doing something about this problem—and they aren't settling for anything less than, "no visible stack discharge." This means dust recovery equipment with high collection efficiencies—95% to 98% for reasonable safety.

99% Collection Efficiency

That's where Research Corporation Cottrells come in. These electrical precipitators guarantee collection efficiencies up to 99% and assure you of "no visible stack discharge."

Cottrells have many other profitable uses, too. Take paper manufacturing, for instance. Cottrells recover salt cake from the pulp production process so that it may be re-used again and again. In slightly over a year, this saving usually pays for the entire Cottrell installation. *

With similar high collection efficiencies, Cottrells rack up huge sav-

ings in oil refineries—recovering catalyst. In chemical plants—recovering sulphuric and phosphoric acid. And in non-ferrous smelting plants, Cottrells recover metallic dust and fumes.

Custom Engineered

Cottrell precipitators are no simple, standard device. For top collection efficiency each installation must be custom-engineered. And the engineering must be based on a vast store of practical experience. The more than 2000 precipitators designed by Research Corporation during the past 40 years represent the greatest single fund of precipitator knowledge available.

This knowledge is available to help you solve your problem, whether it's gas cleaning, nuisance abatement or recovering of valuable materials. You may even have in mind some possible Cottrell application that no one has ever thought of before. Research Corporation would welcome the opportunity to explore it. Write today for Bulletin GB, a quick summary of dust collection problems and facts of interest to management men.

RESEARCH CORPORATION
405 Lexington Ave., New York 17, N. Y.
Bound Brook, N. J.

Grant Building, Pittsburgh 19, Pa.
122 South Michigan Ave., Chicago 3, Ill.

No material has everything...but ADD UP ALL YOU GET with DUREZ PHENOLICS

(A WELL-KNOWN EXAMPLE)



If your experience is like that of others in many fields of industry, you will find this on inquiring into Durez Phenolics:

They offer the many properties available in alternate materials, and generally a plus factor that's especially desirable for the application in hand.

Thus in the adding machine case: dimensional stability for accurate fit, light weight for user convenience, comes from the press ready for assembly—and then the plus, a sound-deadening

ing effect inherent in the raw material.

Constantly improved by Durez research, the phenolics are perhaps more than ever the "hard-wear" plastics. They range from glass-fiber-filled to rubber-filled compounds, and with their valuable chemical and electrical properties, they invite profitable investigation for hundreds of applications.

We'll gladly bring to your problem our experience of 33 years as specialists in the phenolics. Ask, too, for our illustrated monthly "Plastics News." Durez Plastics & Chemicals, Inc., 4010 Walck Road, North Tonawanda, New York.



**PHENOLIC
PLASTICS**
for the new
Competitive Era



MOLDING COMPOUNDS. Structural, electrical, and chemical properties in many combinations.



RESINS FOR INDUSTRY. Bonding, casting, coating, laminating, impregnating, and shell molding.

Houston Ship Channel and at a buffet dinner at a local country club.

Another extra is the newly formed Bermac Premium Underwriters, which issues one-year policies on automobiles. Tenants were invited in as stockholders, as well as policyholders, and 11 signed up for stock last January. They're happy about it, for the company has grown from \$18,000 to \$48,000 capital and is expanding fast.

• **Brainchild**—The success of the Bermac Building and Southwest Business Service must be credited to the owner-partners: Mrs. Nell Berleth and F. L. McNutt.

Mrs. Berleth graduated at Rice Institute with an architect's degree at 18, worked her way up to secretary to the president of Reed Roller Bit Co. in Houston, and in 1942 went into partnership with McNutt, a Rice classmate and a Reed Roller Bit officer, to buy into a Plymouth-Dodge dealership in Galveston. She and McNutt continued at Reed until 1949, when they set up their office service. Mrs. Berleth was architect for the conversion of the Bermac Building.

McNutt majored in business administration at Rice, later picked up a law degree and a CPA certificate. He was vice-president and treasurer of Reed Roller Bit until 1949. He maintains his law office in the Bermac Building, while Mrs. Berleth chiefly runs the building and office services.

• **Personalized**—Mrs. Berleth and McNutt attribute the success of the venture to a personalized relationship with the tenants. When one tenant was hospitalized recently, for example, they practically ran his business, even bringing a Dictaphone to his bedside so he could get out letters and reports.

They make a point, too, of protecting their tenants against competitors. Before renting space to an applicant in a given business, they always ask tenants in that business for an O.K.

• **Money-Maker**—The Bermac Building has been booked solidly ever since it opened in January, 1950. Last year, it grossed \$146,000, half from rents and half from office services. That's a tidy sum for a small office building outside the downtown district.

In fact, business is so good that the partners are planning to build a new office building at a site they already own, a block away. This unit would have the advantage of being built from the start as an office service building. Mrs. Berleth will design it, incorporating ideas the partners have had during their five-year experience.

As proposed, the service facilities would be concentrated in the center core of the building, with tenants' offices on the circumference. There will also be conference rooms for sales meetings and other groups.

a buffet
formed
s, which
mobiles.
holders,
I signed
They're
any has
0 capital

the Ber-
Business
owner-
d F. L.

Rice In-
e at 18,
to the
Co. in
to part-
assmate
to buy
ship in
ntinued
set up
th was
the Ber-

admin-
o a law
He was
Reed
intains
building,
ns the

and Mc-
e ven-
p with
it was
e, they
bring-
so he

ro-
etitors.
ant in
k ten-

Build-
since
year,
rents
that's a
g out-

nt the
a new
already
would
from
lding.

porat-
uring
ilities
enter
ants'
e will
meet-



How the Western Maryland Railway helps make **Baltimore a money-saving port**

Cost-careful ocean shippers count every penny. They know Baltimore as America's "money-saving port." Here's why:

Credit appreciable savings to the longshore workers. Their efficiency is high.

Credit another hefty saving to the general level of the Port's charges—all along the line.

Credit added savings to transfer of cargo direct from ships to cars on apron tracks.

Credit still more savings to Baltimore's strategic location; Chesapeake Bay thrusts itself many miles deep into America's busy industrial Mid-land. See how freight rates fa-

vorably reflect this shorter distance.

Do you wonder that the money-saving Port of Baltimore stands No. 2 among all the Nation's ports in export and import tonnage?

Now see the special advantages that the Western Maryland offers you in its Port Covington Terminal:

Modern, well-maintained merchandise piers fully equipped for speedy, low cost cargo handling.

Complete, high capacity facilities for rapid ore, coal and grain transfer.

Berths for 20 ocean-going ships.

Trackroom for 2,000 cars adjacent to the piers. Radiophone-controlled traffic.

By these and other means, Western Maryland cuts ship turnaround time, speeds cargo off pier floors, contributes in substantial degree to Baltimore's reputation as *The Money-Saving Port*.

Can the WM save money for you? Phone our foreign freight specialist in your city.

**WESTERN MARYLAND
RAILWAY**

St. Paul Place, Baltimore 2, Md.

Important link in the movement of heavy traffic, East and West.

How many

pension-plan experts

are there in your company?



WORKING out the details of an employee pension plan is a big job. It's involved and time-consuming—even when it's handled by specialists who do nothing else. So imagine how difficult, how demanding a task it can be for operating executives in your company, however able they may be.

That's one of the reasons so many firms turn the problem of designing, maintaining and guaranteeing pension plans over to The Travelers.

Travelers experts visit your company—appraise its needs—evaluate those needs in terms of what other companies in your field have done—and then, after discussing their findings with you, develop *your* custom-built Travelers Group Pension plan.

You need no longer worry about the bulk of details involved in the administration of your plan—or about the availability of the money when the pensions are to be paid. The plan is not only designed, but is administered—and guaranteed—by The Travelers.

The cost, beyond the payments to the fund itself? Only service expenses—which are as low as experienced specialists can make them.

Call your Travelers agent or broker before you decide on any pension plan. You have nothing to lose—and a great deal to gain in economy and efficiency.

YOU WILL BE WELL SERVED BY



BO
up.

AT
com

S

M
park
trict
jam.
70%

BUSI



Open parking lots (above) are giving way in Houston to garages like the Medical Arts unit (right). Machinery (below) make parking almost automatic.



BOWSER-TYPE parking operation starts when customer drives up. Panel lights show which stalls are vacant.



ATTENDANT drives car onto elevator, pushes a button that corresponds with the number of a vacant parking stall.



ELEVATOR moves up and sideways to designated stall, whose gate opens automatically. Elevator feeds both sides of shaft.

Solving Houston's Parking Jam

Most cities have the problem of parking congestion in downtown districts, but few can match Houston's jam. On a national average, probably 70% of workers in big cities travel to

and from their jobs by public transportation: trains, buses, subway, streetcars. In Houston, 70% drive to work. The city's expressway system has encouraged commuters in this habit.

As a result, about 172,000 cars enter the central business district of Houston on an average day—and the area can accommodate only 18,000 parked cars at a time, on and off the street. Of

Look How Easily

The



"HANDLER"

Handles Loads
up to
4000 Pounds



Just one lever does it all...SHIFTS, LIFTS, BRAKES!

The Colson Handler is the first proved-in-service gasoline-powered Lift Truck with hydraulic drive and hydraulic control. Just one lever does all the work—selects: speed range (low or high), direction (forward or reverse), load movement (raise or lower), and brakes (return to neutral applies brakes automatically).

Rider has unimpaired visibility at all times—backwards or forwards, and the "Handler's" extreme maneuverability permits efficient operation even on busy, narrow aisles.

Six horsepower gasoline engine provides plenty of power for rugged, round-the-clock operation.

Why not write today for free descriptive folder?

THE COLSON CORPORATION

ELYRIA, OHIO

Casters • Hand Trucks • Lift Jack Systems

Hydraulic, Electric and Mechanical Power Lifts and Transports

course, many parking spaces are used successively by various cars during the day, but the jam is still a bad one. It often takes a driver an hour to find a spot to park.

Houston businessmen have become acutely aware of the problem. Office tenants have been hollering for long-time parking space; stores and banks want short-time parking space for their customers. Now there's help in sight for both phases of the dilemma. Eight new parking garages have just been announced, with a total of 3,000 capacity.

• **Four Types**—There are four major types of parking garage, and all are represented in Houston's announced eight and a couple of others already under construction. The types:

Ramp. The customer drives into the ground floor; an attendant takes the car up ramps to whatever floor has an empty spot. This type of operation needs the largest crew of attendants; the ramps take up space that could otherwise be used for storage of cars. But it takes no machinery.

Elevator. From the ground floor, an attendant takes the car by elevator to a floor that has an empty space. Elevators take up less space than ramps, but almost as many attendants are needed.

Bowser. In a mechanized arrangement developed by Bowser Engineering Co., the attendant checks on where a vacancy exists, drives the car on an elevator, presses a button on the elevator that corresponds with the number of the vacant stall. The elevator moves vertically, horizontally, or diagonally until it is opposite the vacant stall; the attendant then drives the car backward or forward into the space (pictures, page 103).

Pigeonhole. This system is even more automatic. The customer pulls up in a parking lane; the attendant determines which stall the car should go in; he presses a button, and a dolly rolls under the car; he pulls a lever, and the car is jacked up on the dolly; another tug at a lever, and the jacked-up car rolls on an elevator. The elevator then moves to a stall as in the Bowser method, but the attendant—still in his office down below—puts the car in its stall by moving a few controls.

• **In the Works**—Here's how Houston's proposed and under-construction garages match up with the four types:

• Tennessee Gas Transmission Co. will build an eight-story ramp-type garage covering 90% of a downtown block, with capacity of 1,500 cars and underground passages to the Commerce Building (owned by Tennessee Gas) and the new Second National Bank that's under construction. On the roof will be a heliport.

• Texas Autopark, Inc., will build five pigeonhole-type garages, with a combined capacity of 1,000 cars. The

are used
luring the
d one. It
to find a

become
n. Office
for long-
nd banks
e for their
o in sight
na. Eight
t been an-
0 capacity.
our major
d all are
nnounced
ers already
es:

es into the
es the car
an empty
needs the
e ramps
erwise be
t takes no

floor, an
vator to a
e. Eleva-
amps, but
e needed.
angement
ring Co.,
ere a va-
n an eleva-
elevator
umber of
or moves
nally un-
stall; the
backward
(pictures,

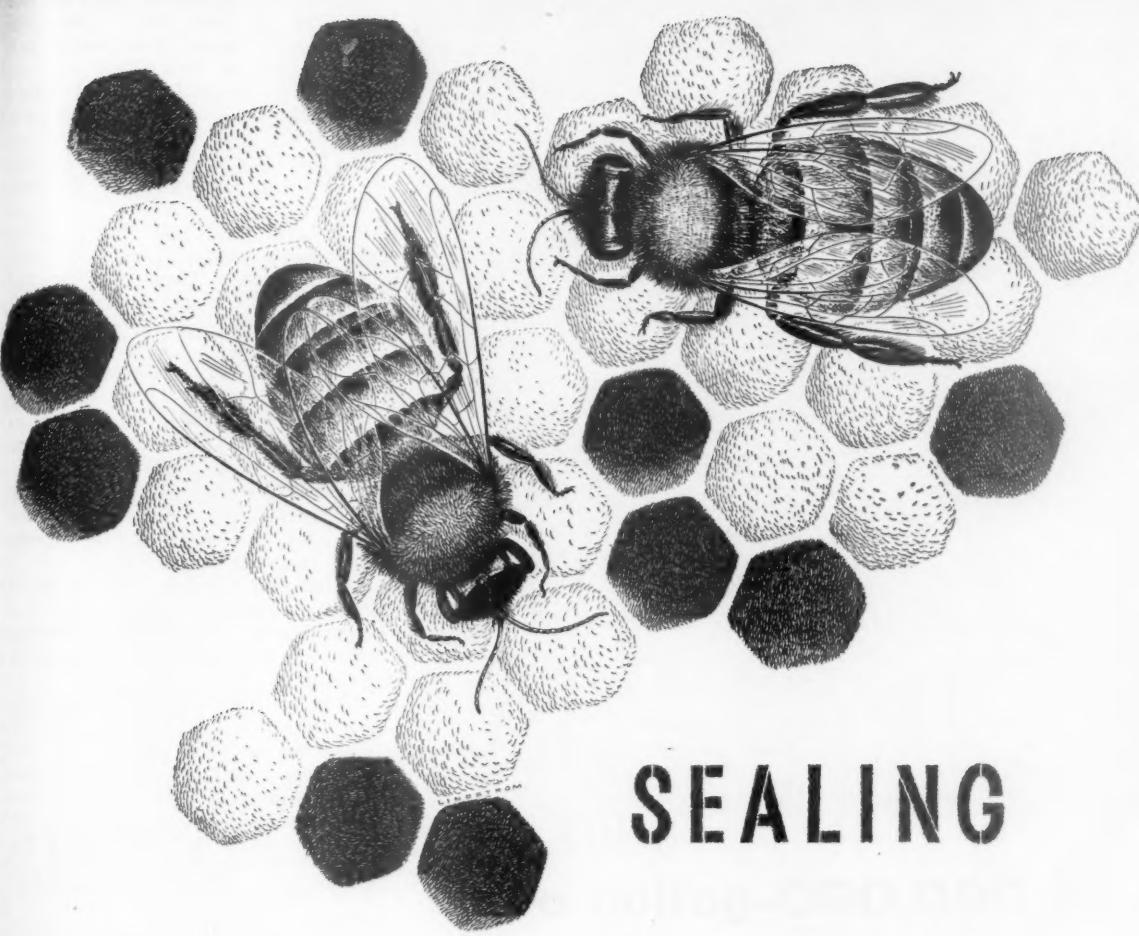
en more
lls up in
etermines
o in; he
lls under
the car
other tug
car rolls
en moves
hod, but
ce down
by mov-

Houston's
n garages

mission
amp-type
ntown
ars and
commerce
(see Gas)
al Bank
the roof

ill build
with a
rs. The

9, 1954



SEALING

Bees, by nature, are master sealers. And so it is with Spongex cellular materials. With its natural resiliency and pliancy, Spongex can form a seal between non-resilient...and dissimilar...shapes, surfaces and materials.

As an iron lung collar, Spongex seals out air. As incubator gasketing, Spongex seals against cold. As tank gasketing, Spongex seals out weather.

Spongex discs in radiator valves rid systems of air, yet dam water. Spongex strips in air conditioners mean quieter, more efficient operation. Spongex, as a pedal seal, keeps out dirt, moisture and motor noise.

These are just a few of the ways in which Spongex is used for sealing. And sealing is but one of the many functions of Spongex cellular materials. Others are insulation, sound and vibration damping, shock absorption, flotation and cushioning. If you'll write us, we'll be happy to give you the complete Spongex story.

Seals for:

Iron lung

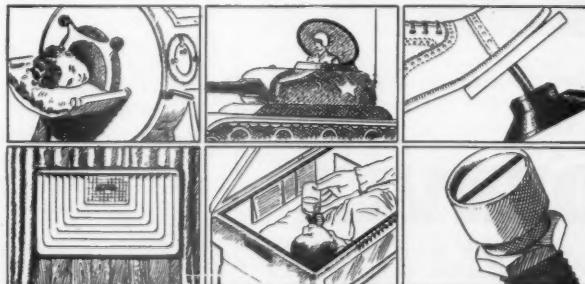
Tank

Auto pedal

Air conditioner

Incubator

Radiator valve



SPONGEX
cellular materials

B. F. Goodrich
Sponge Products Division

17 Derby Place, Shelton, Connecticut



A 20,000,000-gallon oasis speeded by GARDNER-DENVER

The city of Tucson needed a larger water reservoir . . . wanted it fast. The contractor, Austad Steel and Construction Co., dared not risk delay . . . chose Gardner-Denver portable compressors for supplying compressed air vital to construction work.

All over the world, experienced men . . . with important assignments in construction, mining, petroleum and general industry . . . put their faith in Gardner-Denver. Gardner-Denver Company, Quincy, Illinois.



Gardner-Denver 600 Portable Air Compressor on the job site.

SINCE 1859

GARDNER-DENVER

THE QUALITY LEADER IN COMPRESSORS, PUMPS AND ROCK DRILLS FOR CONSTRUCTION, MINING, PETROLEUM AND GENERAL INDUSTRY

first two will be started this year: one for 304 cars near Foley's store, the other for 96 cars on Texas Avenue half a block from the Rice Hotel.

• City National Bank will expand its elevator-type garage to hold an additional 300 cars. Work began a few days ago. This garage is mainly for contract parking for tenants of the bank building.

• The Jesse Jones interests are planning a six-story garage for more than 300 cars at Capitol Avenue and Travis Street. Cost is estimated at \$1-million; the type of garage hasn't been announced.

• The Texas National Bank's Bowser-type garage, 12 floors holding 518 cars, is scheduled for completion by yearend. It will primarily serve tenants of the bank's new building.

• The Medical Arts Building garage (pictures, page 103), also of the Bowser type, was completed two months ago. It houses 312 cars.

• **Heart of a Problem**—This splurge of garage projects is important because it centers around the newest downtown office district, where parking needs are greatest.

Of the city's 18,000 downtown parking spaces, about 3,500 are at the curb, 9,000 are in open parking lots, and 5,500 are in parking garages. As new office buildings are built, the need for parking sites goes up, while the available space goes down—the Texas National Bank and the Second National Bank both are building on the sites of former parking lots.

• **Good Investment**—Along with the need, Houston businessmen see opportunity. The city is rich in investment capital, and investors have suddenly decided that parking is a big and profitable business.

Garage projects are encouraged, too, by the attitude of the money lenders that no new office building is complete without a garage of its own.

• **Well Planned**—Another strong point of the new garages is that they are planned, after long study, to fit exactly the kind of use the locality most urgently requires.

When Tennessee Gas decided to investigate the garage idea, its first move was to hire a leading traffic and business consultant, Thomas E. Willier. For months, Willier studied the accessibility of the proposed site from city streets and freeways, the demand for parking in the area, and the various types of demand.

Then he went into the questions of how big the garage should be, what type, what investment return could be expected, how the design can best fit in with the traffic pattern around the block. Only after Willier had checked the proposed garage from every angle were architects and engineers called in.



Why **RCA** uses
PLASKON® Alkyd
in its first TV
color tube!

*Molded by Mechanical Institute
Boonton, New Jersey*

When RCA electronic engineers designed their first TV color tube for mass production, they discovered the need for a material with special properties to be used for the tube base molding. Arc resistance and superior dielectric strength, as well as resistance to heat and humidity, are essential qualities in this critical component. In their search for the best suited material, RCA investigated mineral filled PLASKON Alkyd and discovered that this material offers all of these features . . . and in addition, it affords an extremely high rate of

production due to its ready moldability. The choice was an obvious one . . . PLASKON Alkyd because of its favorable electrical characteristics and possible production economies.

More and more nationally known manufacturers, in their search for better suited materials, are turning to PLASKON Plastics and Resins. Continued up-to-the-minute research in Barrett Laboratories has given PLASKON Products a position of leadership in electronics as well as in numerous other fields where improved plastics are needed.

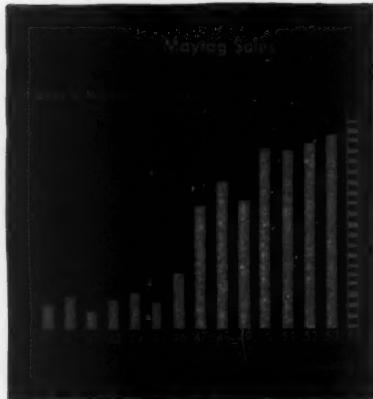
For full information on what PLASKON Products can do for you, write or call your nearest Plaskon Man.



For further information on PLASKON Plastics and Resins, address BARRETT DIVISION, Allied Chemical & Dye Corporation, 40 Rector Street, New York 6, N. Y. Hanover 2-7300



MARKETING





Steel Span Is Link In Expressway Skirting New Jersey Coast

sign. In
red May-
better to
Already
week back-
machines.
production
o its tra-
quality
permatic
he drier
the list
models and
top-price

ve to re-
o a basic
raphy that
its prin-
the field

9, 1954

The new Garden State Parkway brings New Jersey shore resorts hours nearer the New York Metropolitan area. Using the Parkway, the vacationist can now drive to Asbury Park, Spring Lake or Atlantic City over a broad, limited-access highway, free of intersections, traffic tangles and stop lights.

Southern terminus of the Parkway is Cape May, at the state's lower tip. In its 165-mile length there are 282 bridges. Longest of these is the 4400-foot steel span over the Raritan River, near Perth Amboy.

The photograph shows the Raritan River Bridge (in the foreground) as it looked in the spring of this year, at the time when Bethlehem erection crews

were raising a 200-ton girder 135 feet in the air from a carfloat, and setting it down into place. Just beyond the new bridge is the older Edison Bridge, carrying New Jersey Route 9 across the Raritan.

The giant girder, 263 feet end-to-end, was one of four such girders that Bethlehem placed in erecting the steel-work for the bridge. These girders were fabricated at Bethlehem's Pottstown, Pa., works, then shipped to Jersey City on flat cars, assembled on carfloats and towed up the river to the bridge. There the somewhat tricky operation

of hoisting the girders into place was successfully carried out, using two powerful derricks, one located on the bridge itself, the other down at the water level.

The New Jersey Highway Authority predicts that from the start the Garden State Parkway will be the busiest highway in the state, and is planning for still heavier traffic in years to come. The foundations of the Raritan River Bridge are built extra large so that the bridge roadway can be made thirty feet wider when the growth of traffic necessitates expansion.

BETHLEHEM STEEL



Concerned with COST CONTROL?



Get Thilco's "Fact File" of money saving
PROTECTIVE PACKAGE WRAPPINGS



Thilco's "Fact File" contains condensed, yet detailed reports of various manufacturers who are effecting substantial savings and improved product protection with Thilco "Imagineered Packaging".

- A tool company substituted a single, brightly colored laminated greaseproof wrap for a double wrap, resulting in better protection and a more sales appealing package at lower cost.
- A textile manufacturer saves 4½ cents per unit and gets safer protection with Thilco's exclusive non-staining wrap.
- A nursery is saving 44 cents on each wrapping of rose bushes for shipment.

Important too, is that in each instance, the paper furnished also included PRINT DECORATING for identity and advertising.

THILCO "Imagineered Packaging"

CAN BE A DECIDING FACTOR IN HIGHER PROFITS

Write for this "Fact File" on your company letterhead today. It suggests important ways and means for new cost controls you can supply to your own business.



NEW YORK • CHICAGO • DETROIT • MINNEAPOLIS • CINCINNATI



"THE 1922 wringer-type washer was so vastly improved over anything else on the market that nobody believed how good it was."

is pretty much out of the running for the lead in the over-all home laundry market).

• **Whirlpool**—On the one hand, Whirlpool banks on the theory of two separate brand lines for different pocketbooks.

It sells its prestige line of home laundry equipment under its own Whirlpool name. This line has a broad price range, both above and below Maytag but above the list prices of "standard price" models. Its washers run up to \$349.95, its dryers to \$305.44. This line, the trade thinks, is where Whirlpool makes its profit.

What really put Whirlpool on top of the home laundry market, though, is the Kenmore line of washers, dryers, and ironers. The company manufactures this line, mechanically similar to the Whirlpool models, exclusively for Sears, Roebuck & Co. Through Sears' wide distribution and lower prices, Whirlpool gets its volume.

Kenmore washers sell for around \$259.95, dryers for \$169.95—below most Whirlpool models and far below the Maytag automatics. Though the trade is close-mouthed on product breakdowns, leaders in the automatic washer category can be figured in about this order: Kenmore first, Maytag second, Whirlpool third.

Whirlpool started making automatics nearly three years before Maytag. That was in 1946. Thanks chiefly to the Kenmore line, in 1951 Whirlpool's total sales of \$88.1-million passed Maytag's \$82.7-million volume. Last year, Whirlpool sold \$149.1-million, compared with \$89-million for Maytag.

• **Maytag**—On the other hand, Maytag has always emphasized the quality of its own line—not price. This is one rea-

son Fred Maytag opposes discounting, though he admits he doesn't have a solution to the problem. He feels that price cuts usually come out of dealers' margins—"and unhappy dealers don't make good salesmen."

It was product quality, not price, that put Maytag in first place in washer sales back in the mid-1920s. The company turned the trick with a wringer-type machine (nobody was making automatics then) that was so vastly improved over anything else on the market, says Fred Maytag, "that nobody believed how good it was." So the first Fred L. Maytag, founder of the company and grandfather of Fred II, ran a house-to-house sales campaign to convince customers.

The slogan then was: "If it doesn't sell itself, don't keep it." And Maytag soon began making the boast about its customers that it makes today: "Once a Maytag owner, always a Maytag owner."

II. Switch to Automatics

The founding Maytag laid down conservative policies for the company. Bendix started turning out automatic washers as early as 1936, but Maytag never quivered. Then came Whirlpool's automatic in 1946. Maytag stuck to its wringer machine right down to 1948, when it broke ground for a new plant to build automatics.

Fred Maytag has several explanations for the company's tardiness in going automatic:

• "We knew we needed an automatic some time before we started making them, but we didn't have the personnel to do it." Maytag is comparatively small company, with three plants now and 3,700 employees. During the war, it was devoted wholly to military work.

• "We wanted to wait until we had a damn good automatic." Research and development hadn't really made progress until after the war interruption.

• "When you're making money, it isn't easy to see need for an immediate change—wringers washers seemed to be doing all right." This could well be the prime reason. The chart on page 108 shows the growth of sales—all in wringer types until 1949.

• **Setback**—Ironically, it wasn't until more than a year after Maytag got going on its automatic models that the company lost the top spot in the washer market. Just as the new automatics were being launched, appliance sales turned downward. That was in 1949. Then came Korean War shortages of materials.

Maytag wasn't worrying too much, though, for it hadn't yet bet too many chips on the automatics. Back in 1948, automatics still accounted for only 18% of all washer sales; the company had

ounting have a
eels that
dealers'
rs don't
ice, that
her sales
company
nger-type
automat-
improved
ket, says
believed
Fred L.
any and
house-to-
ence cus-

doesn't
Maytag
about its
"Once a
owner."

own con-
mpany.
omatic
Maytag
rpool's
k to its
o 1948,
v plant

inations
going

n auto-
d making
the per-
compara-
plants
ing the
military

until we
research
made
option.
oney, it
mediate
to be
be the
age 108
wringier

until
g got
at the
washer
matics
sales
1949.
ges of

much,
many
1948,
18%
y had

, 1954



Bond metal to metal without heat or pressure

A new Armstrong Adhesive—J-1151—makes it possible to bond metal to metal without heat or mechanical pressure. The resulting joints develop tensile strengths as high as 2,000 psi.

J-1151 is particularly practical when bonding contoured metal shapes—even those with compound curves—because only enough pressure to insure contact is needed. Materials that might be damaged by heat or pressure—light gauge metals, glass, or foamed plastics—can be safely joined with J-1151. Even non-porous materials such as glass and highly finished metals can be permanently bonded.

Another unique advantage of this new adhesive is apparent when assembling two materials with different thermal coefficients. Cured J-1151 has just enough flexibility to absorb the movement between the two surfaces.

J-1151 forms a rigid bond that is highly resistant to chemicals, solvents, hydraulic fluids, and oils. And because there's virtually no shrinkage with J-1151, it's ideal for precision work such as bonding dial faces to gauges where distortion cannot be tolerated.

For information on J-1151 and other adhesives, coatings, and sealers, write for a copy of Armstrong's 1954 manual, free to industrial users. Armstrong Cork Company, Industrial Division, 8010 Indian Road, Lancaster, Pa. In Canada, 6911 Decarie Boulevard, Montreal.

Armstrong
ADHESIVES • COATINGS • SEALERS
by the makers of Armstrong Linoleum

The Tandem-Rotor BELL HSL-1 Helicopter

A Bell-designed autopilot enables this submarine hunter and killer to hover motionless for long periods of time while crewmen maneuver its dipping sonar.



NORDEN Precision Reduction Gear Box

vital to the performance of a Bell autopilot.

When ultra-precision at maximum performance and minimum weight is a mandatory speed reduction requirement in computers, synchro mechanisms, or other instrumentation systems, select a Norden Precision Reduction Gear Box.

PERFORMANCE

Reduction ratios to 20,000:1 have been attained without sacrificing performance. Friction is almost without identity since the greatest reduction requires less than .01 in.-oz. of input torque. Acceptance tests of units now in production indicate backlash of less than 0.25° at the output. All gearing for a gear box with a 20,000:1 reduction weighs only 6.5 ounces and is contained within an area 2-3/32" x 2-3/32" x 7/8" exclusive of mounting flanges.

COMPONENTS

Materials used for gears and pinions are dependent upon the respective requirements for such factors as average life expectancy, reduction ratio, operational speed, and torque. The same consideration of requisites is given in determining bearing materials and/or the size and type of precision anti-friction ball bearings to be incorporated. Lubricants are selected for specific temperature range operation and maximum protection against corrosion. Die cast, stamped sheet metal or machined housings are chosen for maximum durability, minimum weight and relative costs.

With the ever increasing demand for precision products ranging from the smallest, most sensitive element to expansive Navigational, Fire Control and Bomb Director systems, the name Norden has become more and more familiar. To the Norden people, no challenge is too great!

Precision Instruments and Precision Control Systems are our Business

THE NORDEN
LABORATORIES CORPORATION
MILFORD, CONNECTICUT



"MAYTAG was first to develop the modern agitator that forces water through the clothes instead of pulling the clothes through the water."

decided to make them, but it didn't feel desperate about pushing them. Today, of course, the situation is very different: Automatics passed 51% of the market two years ago, and Maytag's own estimate is that they will account for 67% of all washers sold next year.

III. Long History

The key to Maytag Co.'s conservatism—and strength—lies in its history and its status as leading industry in a small city. The company's headquarters and two of its three plants (the third plant is in Hampton, Iowa, 90 mi. away) are in Newton, Iowa. There, in 1893, the first Fred Maytag founded the company as a farm machinery manufacturer, the Parsons Band Cutter & Self Feeder Co.

This farm equipment company built its first washing machine in 1907. Two years later, the elder Maytag acquired full control of the company and renamed it the Maytag Co. The washers were steadily improved, with a big jump ahead in the 1922 model, with its new agitator to force water through the clothes instead of pulling the clothes through the water. This was the model that pushed Maytag into the lead.

• **Fast Growth**—In 1924, Maytag added a line of ironers. Sales in 1926 topped \$26-million; in 1927, the company turned out its 1-millionth washer.

Maytag rolled fairly smoothly through the Depression years, recovered from a serious strike in 1938, held its own during World War II and the Korean War. In fact, 1950 was the year Maytag hit its peak of nearly \$10.5-million in net profits—also the year before Whirlpool wrested the sales lead away. By then, Maytag also had a line of



SPRA-TAINER: Does It Again!

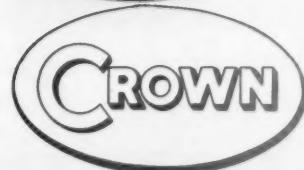


PAINT "Thru the Air" With the GREATEST OF EASE!

16 Enamel Colors to choose from. Also Clear Plastic and Appliance White . . . as well as Black, White and Clear Lacquers. No brushes, no thinning or mixing. Just press the button and spray.

SHEFFIELD QUIK ★ SPRAY in its full range of decorator colors comes to you in Crown's pressurized SPRA-TAINER — first and leading lightweight, low-cost propulsion package. With its seamless construction, SPRA-TAINER meets Government "2P" specifications for greater pressure tolerance . . . hence it's perfect for lacquers and enamels. With its "Modern Design" and colorful Lithography, SPRA-TAINER sells your product!

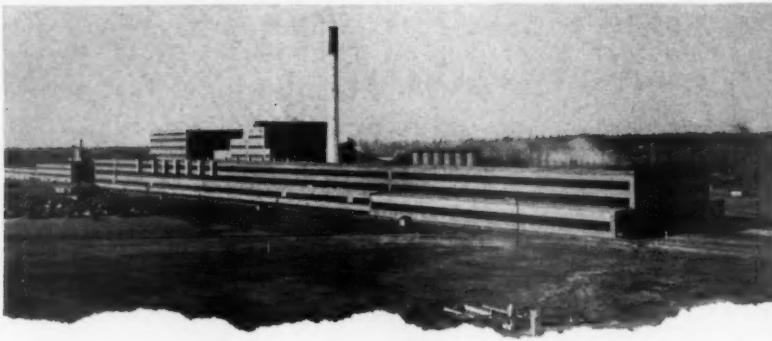
Crown's Complete Line of Cans embraces a far-reaching variety of finest quality metal packages for a wide range of products. May we send you our catalogue?



CROWN CORK & SEAL COMPANY, INC.
CROWN CAN DIVISION

One of America's Largest Can Manufacturers

PHILADELPHIA, Chicago, Orlando, Baltimore, New York, Boston, St. Louis



"We've Tripled our Plant in Five Years"

ERLING RIIS
Vice-President
INTERNATIONAL PAPER COMPANY

"We selected Natchez as the site for our first rayon pulp manufacturing plant after a thorough investigation of possible sites. Natchez offered convenient raw materials, a good labor supply, and a site on the Mississippi River. But even more important was the sincere welcome we received from the people of Natchez. Under Mississippi's BAWI plan Natchez citizens voted overwhelmingly in favor of a \$300,000 bond issue to provide us with a site. Although we declined this generous offer, we were impressed with the cooperative spirit of Mississippians.

"The first unit of our plant was completed in 1950. Since that time we have tripled the capacity of our Natchez plant and are happy to say that our Mississippi operations have been quite successful."

International Paper Company, which also operates a plant at Moss Point, is but one of numerous nationally known industries which are operating successfully in a state which is rapidly forging ahead.

Mississippi offers many advantages to industry — large reservoirs of intelligent, cooperative labor, expanding Southern markets, abundant fuel and electricity and immense stores of raw materials.

One advantage not to be found elsewhere is Mississippi's BAWI (balance agriculture with industry) plan under which political subdivisions may vote bonds to finance the purchase of sites and the construction of buildings for lease to new or expanding industries.

We invite your further investigation of Mississippi and its BAWI plan. Your request for information will be handled promptly and treated with confidence.



MISSISSIPPI
AGRICULTURAL AND INDUSTRIAL BOARD
State Office Building • Jackson, Mississippi



"WE know we can't achieve our goal in one advertising campaign or even in the last quarter of this year. But we think we can do it."

ranges and a line of freezers, both added in 1946.

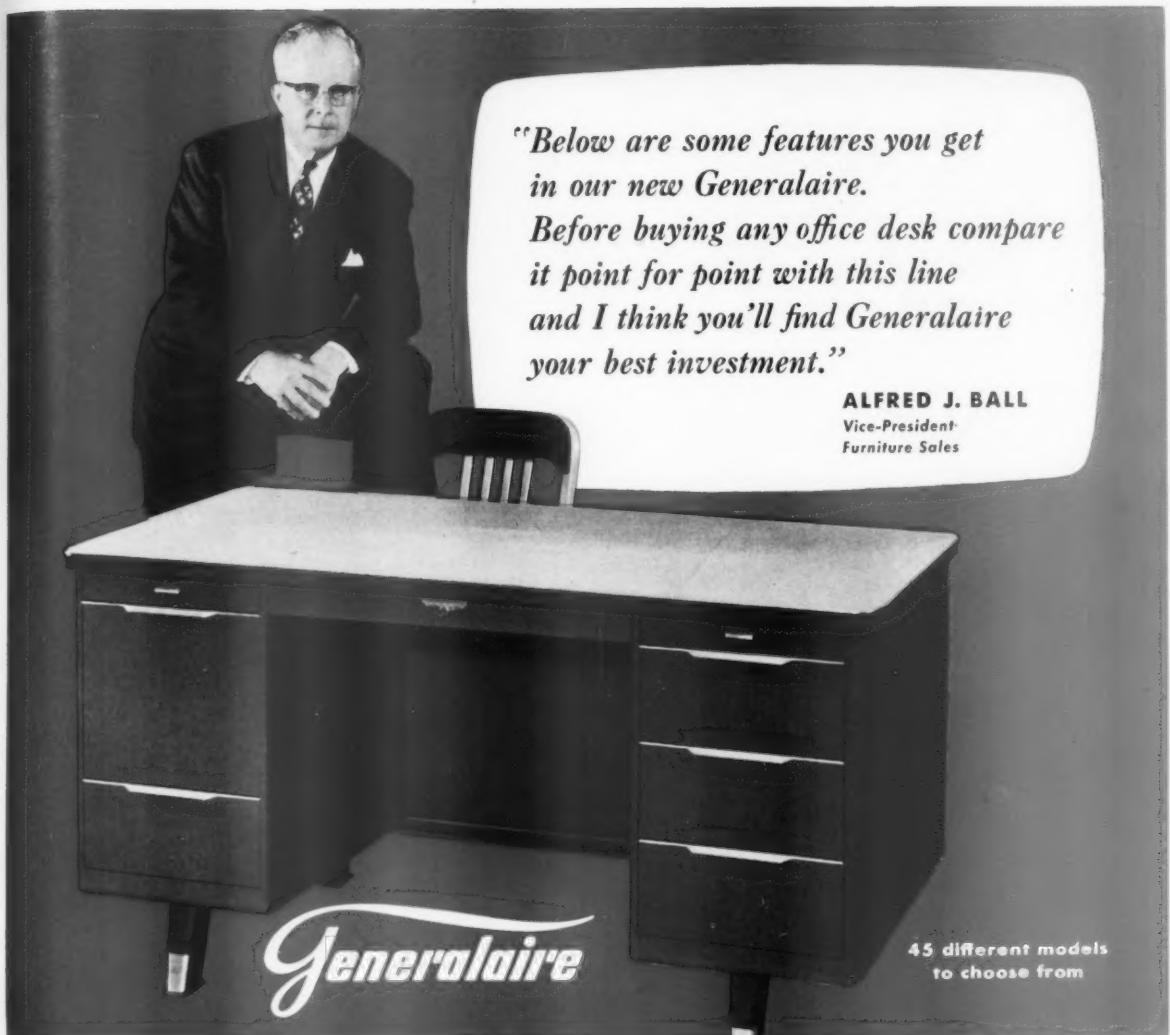
• **Maytag Town**—The company's history reflects the personality of the succession of Maytag family members who have run the front office. Grandfather Fred made Newton his town—it now has a Maytag Park, a Maytag Hotel, a Maytag Bowl, a Maytag Dairy. Half the city's 13,000 population depend on Maytag for their livelihood.

Fred II, who was only 29 when he took over as president in 1940, is easy, affable, conservative in the family tradition. He served a term as state senator (Republican, of course), turned down bids to nominate him for governor and for U. S. senator. He isn't hide-bound in his conservatism. His racy Jaguar sports car and his readiness to play a part in promotional high jinks (picture, page 108) stand as evidence that he is adaptable to modern Supermatic ideas.

Fred Maytag now even poses with J. Fred Muggs, the chimpanzee on Dave Garroway's TV show "Today"—Grandfather Fred would have been shocked, but the modern Fred sees it merely as part of the new fired-up publicity campaign.

The day the new Supermatics were unveiled this week was M-Day (M for Maytag). Maytag's 15,000 dealers are donning firemen's hats, and the new washers are crated in brilliant red to carry out the promotion theme. The dealers' stocks are being shipped in special freight cars and in truck caravans.

"We know we can't achieve our goal in one advertising campaign, or even in the last quarter of this year," says Fred Maytag. "But we think we can do it."



"Below are some features you get in our new Generalaire. Before buying any office desk compare it point for point with this line and I think you'll find Generalaire your best investment."

ALFRED J. BALL
Vice-President
Furniture Sales

© GF Co. 1954

Durable, easy-to-clean Velvoleum or Textolite writing surface.

Space-saving 30-inch depth.

Aluminum top binding combines maximum protection with attractive appearance.

Locking device that saves time and effort in operation of pedestal drawers.

Insulated for quiet operation.

Self-lubricating nylon bearings for easy and quiet drawer movement.

Wide aluminum pulls protect top edges of drawers and reduce reach.

Complete line of accessories for any office job.

Full panel backs for comfort and appearance.

Adjustable to either 29" or 30½" height. No movable glides to cause vibration.

Aluminum shoes with non-skid rubber foot plates.

Sanitary leg base for easy cleaning and moving.

Baked enamel finish requires minimum maintenance.

Anodized aluminum trim can't rust or corrode.

All-metal construction eliminates splinters, rough edges, sticking drawers.

Modern styling that still harmonizes with older models.

Generalaire is the ultra modern desk — the newest creation of the world's largest manufacturer of desks.

The General Fireproofing Company, Department B-36, Youngstown 1, Ohio.



MODE-MAKER DESKS • GOODFORM
ALUMINUM CHAIRS • SUPER-FILER
MECHANIZED FILING EQUIPMENT •
GF ADJUSTABLE STEEL SHELVING

Good metal business furniture is a good investment

al in one
the last
k we can

th added

ny's his-
the suc-
pers who
ndfather
—it now
Hotel, a
y. Half
pend on

when he
is easy,
nily tra-
rate sen-
turned
or gover-
n't hide-
His racy
ness to
ugh jinks
evidence
n Super-

es with
on Dave
-Grand-
shocked,
erely as
cam-

cs were
(M for
lers are
the new
red to
. The
ped in
k car-

ur goal
or even
," says
we can

9, 1954



As one of the great carriers of merchandise freight, the C&O sponsors this campaign in the belief that a better understanding of the Traffic Manager's job will contribute to the better and more economical movement of material.

The scissors that cuts red tape

It was ten o'clock in the morning when the Traffic Manager of one of the major oil companies had a call from a new field where his company was sinking some exploratory wells. They had hit a terrific gusher. The nearest refinery was hundreds of miles away.

"How soon must you start shipping?" he asked.

"Tomorrow," came the reply. "We have the railroads rounding up every available tank car right now."

But the Traffic Manager knew there was no published rate covering such a movement — no oil had ever been shipped from the area. And as every Traffic Manager knows, getting a new rate approved and published — particularly when there are several railroads involved — simply can't be done in less than 30 to 60 days.

On this one occasion the new rate was agreed on and approved by all concerned at 3 o'clock that same

afternoon and became effective the following morning as the loaded tank cars started rolling out. Probably an all-time record.

How was this Traffic Manager able to accomplish his miracle? Well, there were several reasons:

He knew all the rules, regulations and precedents involved, so he didn't have to look them up.

He was on a first-name basis with every one of the railroad officials concerned.

They had all known him for years; each of them felt sure he was being absolutely honest with them and that they could accept without question everything he said.

Knowledge. Contacts. Integrity.

These are the prime assets of a Traffic Manager. They enable him to take emergencies in his stride — and, once in a while, to accomplish the impossible.

Chesapeake and Ohio Railway

TERMINAL TOWER, CLEVELAND 1, OHIO



Sketched in a Suite
at the Waldorf-Astoria

A HILTON GUEST ENJOYS THE BEST

In New York	In Chicago
THE WALDORF-ASTORIA	THE CONRAD HILTON
THE PLAZA	THE PALMER HOUSE
THE ROOSEVELT	
THE NEW YORKER	
In Washington, D. C.	In Los Angeles
THE MAYFLOWER	THE TOWN HOUSE
	In Dayton, Ohio
In St. Louis, Mo.	THE DAYTON BILTMORE
THE JEFFERSON	
In Columbus, Ohio	In Albuquerque, New Mexico
THE DESHILER HILTON	THE HILTON HOTEL
	In Chihuahua, Mexico
In Fort Worth	THE PALACIO HILTON
and El Paso, Texas	
THE HILTON HOTEL	In San Juan, Puerto Rico
In San Bernardino, Cal.	THE CARIBE HILTON
ARROWHEAD SPRINGS	
	In Madrid, Spain
	THE CASTELLANA HILTON
In Istanbul, Turkey	—THE ISTANBIL HILTON
	(Opening early 1955)

The Key to
Business Prestige

Successful businessmen value the prestige associated with staying at a Hilton Hotel.

Whether holding conferences in the gracious surroundings of their hotel room or contacting clients at their offices, they find a Hilton address enhances their business standing.

The convenient locations, modern accommodations and distinctive character make Hilton Hotels the ideal headquarters for men and women.

Hilton  *Hotels*

Conrad N. Hilton, President

EXECUTIVE OFFICES • THE CONRAD HILTON • CHICAGO 5, ILLINOIS



ARCHIBALD CROSSLEY this week merged his opinion research company with that of . . .



ARTHUR DOUGALL of S-D Surveys, Inc., market research consultants. The two men are . . .

Pooling Their Opinion Polls

The opinion research business has come a long way since what its practitioners now refer to as "our nose-counting days." The pollsters have learned how to construct samples that mean something, how to build questionnaires that wheedle an extraordinary amount of information out of people. But they haven't licked one problem: seeing that the field work is done right.

No matter how sound the sample, how shrewd the questions, a poll stands or falls on the intelligence and honesty of the interviewers in the field. Much of the interviewing nowadays, the experts admit, is done sloppily. If the body of raw data is to mean much, they add, research firms will have to get tighter control over what goes on in the field.

With this kind of control, an opinion poll can cope with the newly complex research work that the clients demand. It can train its own staff of interviewers and, as business volume grows, assure them of pretty nearly full-time employment.

• **New Company**—It looks as if the profession is about to make a determined move in this direction. That's the chief significance of a merger this week between two well-known opinion research groups:

• S-D Surveys, Inc., headed by

Arthur Dougall (picture) and a subsidiary of Stewart, Dougall & Associates, Inc., one of the oldest marketing consultant firms in the country, and probably the largest.

• Crossley, Inc., owned and directed by Archibald Crossley (picture), a pioneer in opinion research since World War I and best known for his Crossley Poll during Presidential campaigns.

The merger results in Crossley S-D Surveys, which its principals think will be the largest research organization, with a field force that may total more than 1,000 interviewers. Archibald Crossley will be president of the new concern, vice-president of Stewart, Dougall; Arthur Dougall, president of Stewart, Dougall, will be chairman of the board of the new company.

• **Complementary**—The merger is a marriage of convenience between two old friends who have worked together for years. Both sides' reasons for entering into the arrangement give some interesting clues as to developments in the business:

Crossley, Inc., has only a small headquarters staff in New York, plus supervisors in the field. Says Crossley:

"We're called upon more and more to do something about the reports we make. All we've done up to now is

gather material and report it. We interpret it, yes. But now clients want to know how to use it."

Crossley simply hasn't the staff to fill this function. Stewart, Dougall's large staff of marketing and management consultants will supply this lack.

S-D Surveys, on the other hand, needs the business that Crossley can bring with him and can help develop through his name and talents. S-D needs business because it has created an extensive—and expensive—piece of research machinery, with more than 40 people in its New York office, supervisors in the field, and a growing number of field interviewers (more than 800) who work either exclusively or part-time for S-D Surveys. This organization must be fed with enough business to justify the heavy fixed overhead.

• **Populated Field**—The merger sheds some light, too, on the whole opinion research field.

Up to now it has been dominated largely by the individual expert and the individual interviewer. It has never required very much in the way of assets to get into either end of the business—except, on the part of the experts, some knowledge.

As in a lot of other professions, the typical way for a young man to get a start is to work with one of the



Photographed underwater at Weeki Wachee Spring, Florida

Daring Explorer makes Patapar underwater test

This fellow likes to do everything the hard way. But you don't have to go to this much trouble to prove that Patapar Vegetable Parchment really does have an almost unbelievable WET-STRENGTH. You can soak Patapar for hours and hours — even boil it — but it still stays strong.

Patapar resists grease too

Patapar resists the penetration of fats, oils and grease just as effectively as it stands up in water. These qualities make it ideal as a food wrapper and for many other uses. And — Patapar is NON-TOXIC.

Some of Patapar's many uses

Patapar is produced in different types that meet all sorts of exacting require-

ments. Some of its diversified uses: wrappers for butter, poultry, margarine, ham, bacon, pork loins, cheese and other moist foods; milk can gaskets; rubber releasing separators; translucent master sheets for direct print copy machines; dialyzing membranes; in hospitals for wrapping articles to be sterilized in live steam. It is furnished in rolls or sheets, plain or beautifully printed with colorful designs.

In your business perhaps there is a job that could be done better with Patapar. Tell us about it, and we will send information and testing samples of the type of Patapar we recommend. Write today.

Patapar
Vegetable Parchment
HI-WET-STRENGTH • GREASE-RESISTING

HEADQUARTERS FOR VEGETABLE PARCHMENT SINCE 1885

**PATERSON PARCHMENT
PAPER COMPANY**

Bristol, Pennsylvania

West Coast Plant:
340 Bryant Street, San Francisco 7
Sales Offices: New York, Chicago

experts for a while, then to walk off with some accounts and open his own shop. While some clusters of pollsters have formed here and there, as in the case of the Survey Research Center of the University of Michigan, commercial research at least has largely been in the hands of lone wolves — Crossley, Hooper, Roper, Politz, Gallup, Robinson (the latter two formed a partnership).

• Interviewers — One reason that it has been comparatively easy to get into the business has been the existence of a far-flung network of field interviewers operating in virtually every nook and cranny of the nation.

Any good pollster has a file of 2,000 or more available interviewers. These are mostly women, many of them older married women whose children have grown up. Such interviewers frequently work for a number of pollsters (some people in the field refer to them as "babysitters"). And if you don't have the names of some interviewers in the Podunk area, a fellow pollster will supply you with them. "We're all friends in this business," says Crossley.

• Organizing — Out of this situation in recent years has come another development. Regional agencies have sprung up that contract to do the work for you through their own field interviewers. Some of them have grown quite large. An informed guess puts the annual volume of the largest regional groups at around \$100,000.

In other cities, the local interviewers have succeeded in reaching amicable agreements on rates, hours, and other matters. There is a particularly tight group in Los Angeles, which makes it, according to research people, a particularly tough town to do business in.

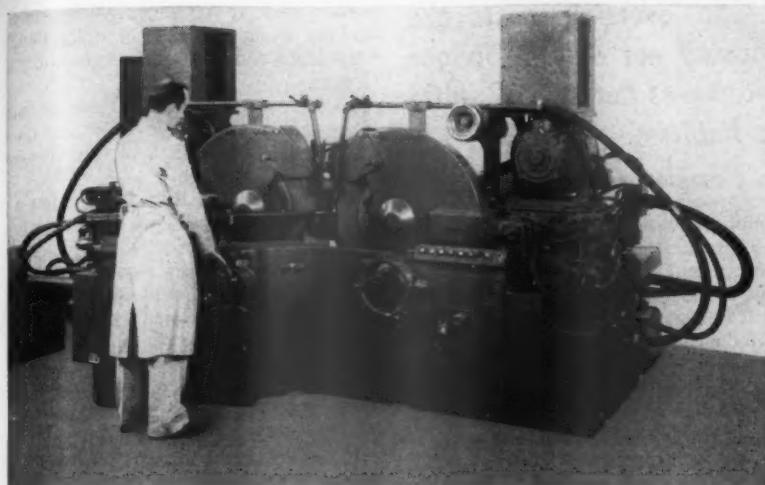
"The interviewers are getting too big for their breeches," says one pollster.

• Shortcoming — This hit-or-miss system worries the opinion research business—and its clients—very much. Standards among interviewers are too low.

"What can you expect?" asks one man in the field. "What kind of help are you going to get for \$1.50 an hour on an irregular basis?"

The question becomes more pertinent as opinion research becomes more complex. The standards didn't need to be so high back in the early days, when Crossley developed the first method of checking radio audiences. The weekly Crossley Ratings were obtained by the comparatively simple method of telephoning to people and asking them what shows they were listening to. (Crossley had discovered that there was a close correlation between homes with telephones and those with radio sets.) But that was back in the 1930s—and the broadcasting industry has long since given up telephone surveys as inadequate.

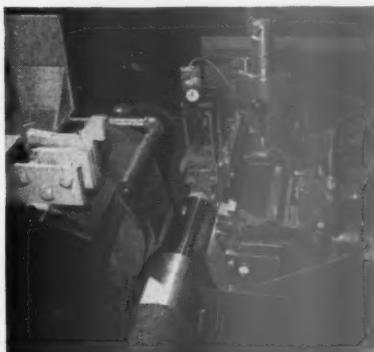
• Complications — Crossley has the



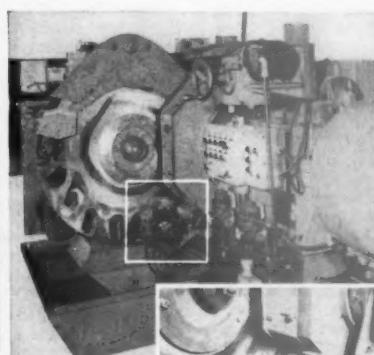
Automotive Rear Axles are ground almost automatically with Federal Machine Controls on the job. The operator loads axle, snaps on gage, pushes start button. Wheels advance automatically . . . one grinding diameter of bearing and oil seal; the other grinds diameter and flange for brake drum and wheel hub. Federal gages control rate of wheel infeed and cause wheels to back up when work reaches size.



Main Journals on Crankshafts are ground quickly without scrap with this Federal Air-Electric Gage in control. The operator loads, snaps caliper on the work and starts the cycle. When work is down to size, the wheel automatically backs up. Scrap due to undersize is eliminated. Large Air Dial and three signal lights provide visual checks on grinding progress.



Journal Surfaces of 1100 lb. Freight Car Axles are automatically size-controlled by a Federal unit, employing an Arnold Continuous Caliper type grinding gage. The gage, which retracts to provide loading clearances automatically, springs onto work and takes control of the process at the start of the grinding cycle. Lights signal when work is "over size", "near size" or "to size". They are electronically connected to machine controls. So, grinding automatically stops when the required size is obtained. Tolerances are consistently held within the plus 0.0005", minus 0.0000" specified.



Spacer Plates are automatically sized on this parallel disc grinder, thanks to Federal Machine Control. The gage controls the feed of the wheels to compensate for wheel wear. Corrections are made alternately to each wheel-head to keep the slotted carrier wheel centered. The result is continuous production of good pieces . . . and no scrap.

Your Plant Can Afford Automatic Machine Control

New machines are appearing on the market which put production on a wholly automatic basis. There's no doubt about their ability to produce dimensional quality at a better rate than ever before. Such advantages apply not only to machine tools but to any other type of equipment where dimensional accuracy is necessary. In the case of machine tools, considerable savings result in making workpieces correctly the first time. The workpiece is finished directly to required size without interruptions for measurement or other delays. Subsequent check-up inspection is reduced to a minimum.

This same principle applies to machines other than machine tools where the dimensional accuracy of the product is important. Much surplus material can be needlessly given away in

an oversize product and much scrap wasted by undersize production.

If your budget does not permit the purchase of new automatic machines, you may be able to secure many of their advantages by applying Federal's standardized automatic control units to your present machines. For example, in the installations shown on this page, see how Federal electrical and electronic gages control machines for large mass-producers. They feed back dimensional information to control feeds and stop operations automatically.

Federal engineers may save time and money for you, too. Automatic machine control is old stuff to them. They've been in it for years. Why not ask for recommendations that will make machine control pay off big in your plant?

FEDERAL PRODUCTS CORPORATION

4210A Eddy Street, Providence 1, R. I.

Ask **FEDERAL**

FOR ANYTHING IN MODERN GAGES...

Dial Indicating, Air, Electric, or electronic — for inspecting, measuring, sorting, or automatically controlling dimensions on machines.

off with
own shop.
ers have
the case
er of the
cial re-
in the
Hooper,
son (the
p).

it has
into the
ce of a
viewers
ook and

of 2,000
These
m older
en have
requently
s (some
hem as
n't have
s in the
er will
e all
Crossley.

ation in
development
sprung
for you
viewers.
e large
ual vol-
oups at

viewers
miable
d other
y tight
akes it,
particu-
in.

too big
lster.

ss sys-
h bus-
Stand-
low.

cks one
of help
n hour

re per-
es more
need to
, when
hod of
weekly
by the
f tele-
them
ng to.
ere was
es with
o sets.)
s—and
ing since
as in-

the

9, 1954

*Add this
copying specialist
to your staff*

PHOTOSTAT
Instant Copier



**for use in every office...
anywhere!**

There's nothing like it! Moderately priced, it soon pays for itself . . . saves labor, time and money.

In one minute, this small, highly efficient machine will give you three or more black-on-white copies of practically any original up to 8½" x 14" in size . . . typed, printed, written or drawn . . . ready for immediate use!

Requires less than two square feet of space on desk or table. Can be used by anyone and everyone, under normal office lighting.

Designed and built by PHOTOSTAT CORPORATION . . . manufacturers of the finest in photocopying equipment . . . to use Eastman Kodak Company's amazing new VERIFAX PROCESS . . . it is entirely different from, and should not be confused with, any previously known process.

You owe it to yourself to get all the facts before purchasing any office copying equipment.

**WRITE US FOR FURTHER DETAILS . . .
RIGHT NOW!**

PHOTOSTAT CORPORATION
295 STATE STREET, ROCHESTER 14, NEW YORK
PHOTOSTAT is the registered trade mark
of PHOTOSTAT CORPORATION

" . . . overtime costs are boosted not only by longer interviews but also by shifts in habits . . . "

OPINION POLLS starts on p. 119

honor of having developed a number of firsts in the business, and some of his more recent innovations show the extent to which the field has become complex. For instance, Crossley has recently introduced the use of Stereo-Realist viewers in interviews on product design research; this means his interviewers must study new techniques of recognizing the subject's reactions.

This complexity has grown as the emphasis in opinion research has shifted from quantitative questions to qualitative ones. Here are some of the areas where opinion research is tackling more difficult jobs:

- Product and design testing: finding out what people like and why before products are put on the market.

- Effectiveness of advertising: measuring the impact of ads on consumers.

- Legal research: finding out, for example, in the case of an alleged copyright infringement, whether or not people find that a similarity in trade names is confusing.

- Health and medicine; developing health "profiles" of U.S. families.

- Motivation research: ferreting out the reasons behind a choice to buy one product instead of another (BW—Aug. 14'54, p50).

The last field, motivation research, has had a particularly powerful effect on the field. S-D Surveys, for instance, now has three psychologists on its staff. Almost every survey, says the concern, has at least one question probing into motivation.

- New Problems—Several things have happened as a consequence of the change in research aims and techniques. For one thing, questionnaires are much longer and more involved than they used to be. (One job that S-D Surveys hopes to get would take a day to complete each interview, but that is admittedly a rare case.) For another, they require of the interviewers at least some competence in word association, sentence completion, thematic apperception.

Added to this are new difficulties that are developing out in the field. Overtime costs are boosted not only by longer interviews but also by shifts in social habits. Clients increasingly show an interest in polling men's opinions, which means that interviewers have to work more at night in order to locate their quarry at home. Likewise the same result is produced by the fact that more

women work. If you're going to include working women in your sample, that, too, means more night work for interviewers.

In the words of Carl Henrickson, vice-president of Crossley S-D Surveys: "We can't use the kind of interviewer we used 10 years ago."

- Keeping a Tight Rein—This raises a lot of important questions: How do you control and train a lot of people you may never have set eyes on? How do you set and keep rigid standards so that you have comparability across the country? How do you eliminate the "cheater" problem?

The growing need to find answers to these questions has forced opinion research people to tighten up on their field workers. S-D Surveys claims that it has gone further in this direction than any other polling organization in the country.

S-D Surveys dates back to 1940, when it was set up as an outgrowth of Stewart, Dougall's market research activities. Eight years ago, the company converted the branch into a corporate subsidiary, thereby doing something that may be unique in the field—it split the functions of polling and analysis. If you want a questionnaire or an interpretation, you go to Stewart, Dougall; if you want to get your questions asked and answered, you go to S-D Surveys. So independent is S-D Surveys that it even does work for some of Stewart, Dougall's competitors in the consultant field.

- Defining Employees—The concern is seeking tighter and tighter control over its 800-odd field interviewers. It pays social security and taxes on all its field staff, makes contributions to state and federal unemployment funds, provides group life insurance protection to an increasing percentage of the staff, carries public liability insurance. The purpose of all this can be seen in this official statement of company policy:

"The strict supervision, training, and instruction we provide field interviewers places them without question within the legal meaning of the word 'employee' and above the meaning of the word 'contractor.'"

S-D Surveys has an increasing number of people on a full-time basis. There are nearly 50 on this basis now, and the company hopes that bringing in Crossley's strength will boost this number considerably.

- Crossley's Role—Under the new setup, Archibald Crossley will get a greater chance than he has had in the past to advise and counsel clients, rather than to spend his time with the technical details of running a research concern.

Will he continue the Crossley Polls in Presidential elections?

"We have no intention," he replies, "of discontinuing it."

MIRAGE OF PERPETUAL BOOM

CAN an economy of private competitive enterprise be made to operate at full capacity all the time? If so, how? If not, what would be the consequences of trying to make it do so?

One of the key issues in the pre-election campaign is what the Government's critics call the "national economic deficit." This means the amount by which the annual rate of output falls short of the level these critics consider necessary to provide "full production" and "full employment."

Concern Over "Purchasing Power"

How do these critics propose that the Government should create and maintain what they call full production and full employment? The general outline is well defined. The Government should spend more money. It should further reduce taxes, especially personal income taxes in the lower brackets. To facilitate borrowing by the Government and by private debtors, the money market should be so manipulated as to make plenty of loanable funds available at low interest rates. Farm prices should be supported at higher levels. Social Security and unemployment compensation should be expanded and liberalized. Higher minimum wages should be enacted, and higher wage rates in general encouraged. The Government should embark upon a large-scale, long-range housing program. More foreign aid should be extended.

All these measures are directed at one primary aim: to increase "purchasing power." The creation of new purchasing power is not a remedy but at best a dangerous palliative, because it is inflationary.

Continuous full-capacity production could be maintained only in an economy where population, buying habits, standards of living, industrial methods, inventions, and changes in prices and costs could all be foreseen and allowed for with com-

plete precision, perfect smoothness and instant timing. Such a society is sometimes imagined by economists for analytical purposes, but it could not possibly exist. As long as human foresight, rationality and physical mobility are less than perfect, the utilization of resources will be less than complete.

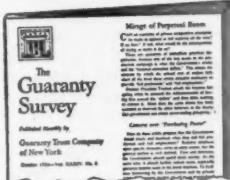
In a regime of free markets, maladjustments are constantly correcting themselves. Yet the correction is never complete, because new maladjustments are always appearing. When markets are not free—when prices, rents, labor costs, interest rates, exchange rates and other values are held rigid or arbitrarily manipulated, either by monopoly power or by political authority—the corrective process is greatly hampered.

Those who demand perpetual boom are demanding the impossible. In the effort to accomplish the impossible, they would resort to inflation as a substitute for needed readjustments.

Economic growth with a minimum of interruptions is, of course, much to be desired. This, however, does not and cannot mean perpetual boom. Interruptions there must occasionally be, and something less than complete utilization of resources there must always be. To treat these departures from theoretical perfection as "national economic deficits" to be resisted by means of inflationary stimulants would be to pull down the tree in the effort to reach the last fruit at the top.

From the October issue of THE GUARANTY SURVEY, monthly review of business and economic conditions published by Guaranty Trust Company of New York.

The complete issue is available on request to our Main Office, 140 Broadway, New York 15, N. Y.



Guaranty Trust Company of New York

Capital Funds \$395,000,000

140 BROADWAY

FIFTH AVE. AT 44th ST.
LONDON

MADISON AVE. AT 60th ST.
PARIS

40 ROCKEFELLER PLAZA
BRUSSELS

Member Federal Deposit Insurance Corporation

get that job done!

use

**manpower,
inc.**

for temporary help



Akron • Allentown • Atlanta • Baltimore • Boston
• Buffalo • Chicago • Cincinnati • Cleveland
• Columbus • Denver • Detroit • Des Moines
• Indianapolis • Kansas City • Miami • Milwaukee
• Minneapolis • Newark • New Haven • New York • Niagara Falls • Omaha • Philadelphia
• Pittsburgh • Portland (Ore.) • Providence
• Rochester (N.Y.) • St. Louis • San Francisco
• Seattle • Syracuse • Tacoma • Tampa • Toledo
• Oakland, Calif. • San Diego, Calif.

For information on services and franchises write Dept. BW 2, Manpower, Inc., Milwaukee 3, Wisconsin.

- STENOS / OFFICE HELP
- TYPISTS / CALCULATING
- TELEPHONE ANSWERING
- DIRECT MAIL
- MARKET SURVEYS
- CAR UNLOADING
- WAREHOUSING

Use our employees in
your office or ours . . . for 4 hours . . .
a day . . . a week . . . or longer. Our em-
ployees are tested, bonded and fully insured.

manpower, inc.

Nation's Largest
Complete
Business Service



**HAVE YOU A
SMALL PRECISION
PARTS
BOTTLENECK?**

If your products require small precision parts like pins, pivots, blades, mandrels, etc., and you're having difficulty getting the kind you want when you want them, let Torrington make them for you.

Our automatic equipment produces over 10 million pieces a day — to customers' exact specifications of tolerance, hardness and microfinish. A trial order will show that we can make your parts faster, better and for less than you can get them elsewhere.



Our Quotation can save you
money and time

Send us a sample part, blueprint or letter outlining your needs. We'll send a quotation promptly. If you want more information, our Condensed Catalog illustrates many other parts we can produce economically.

THE TORRINGTON COMPANY
Specialties Division
5 Field Street, Torrington, Conn.
Makers of Torrington Needle Bearings

TORRINGTON SPECIAL METAL PARTS

Coca-Cola: T

May introduce larger sizes . . . Colored electric appliances gain . . . Price increases in TV sets . . . Leasing gets into new field . . . Blends run strong in summer suits.

For the first time in nearly 40 years, Coca-Cola is toying with the idea of introducing a new bottle size.

In a guarded announcement last week, the company revealed that sometime in the next several months it will test-market two new sizes—one family size, one intermediate—in market areas in the East, Midwest, and Pacific Coast.

Coca-Cola's familiar 6-oz. bottle was introduced in 1915, and Coke hasn't appeared in any other package form since. Though the company didn't say so, it obviously is feeling the trend toward home-use packages of soft drinks, for sales at the supermarket. It may also be feeling the impact of cans. Coke sources say they haven't yet given up their tests with cans, but technical problems are not yet licked.

Colored electric appliances for the modern kitchen are the coming thing, Frigidaire Div. of General Motors Corp. believes.

In a speech before the Porcelain Enamel Institute last week, a GM spokesman tipped off Frigidaire's trend toward pastel-hued ranges, refrigerators, freezers, washers, dryers, and cabinets. Frigidaire, first to put out a diversified line of colored appliances last January, says its decision "stood up well during the past selling season."

Up to now, the colored appliance idea was considered an interesting experiment. A number of makers of single items have put out red stoves, blue freezers, and the like. With color choices in a whole line of appliances, inventory becomes a problem. Some people in the trade propose two possible solutions: (1) have the distributor rather than the retailer carry the stock; or (2) have the customer's order filled at the factory, much as automobiles are sold.

At any rate, the idea of colored appliances is spreading. In addition to Frigidaire's pastel green and yellow lines, General Electric's Hotpoint Div. has bisque-colored range intended to blend with any decorating scheme. GE is also reported experimenting with green and yellow washers and dryers.

TV set makers are trying a new strategy. Philco Corp. this week boosted prices \$10 to \$20 on some lines. Syl-

ola: Tries Out New Bottles

vania Electric Products raised the tags on five models. Allen B. Du Mont Laboratories brought out new lines to sell at some \$10 higher than its former comparable models. Emerson Radio & Phonograph Corp. told distributors that prices on some lines will go up Oct. 15.

The odd thing is the pattern of boosts in the middle and upper price ranges. Since the big sales this year have been in the less expensive models, this doesn't seem to make sense. Yet so far Zenith Radio Corp. is the only big concern to apply price hikes at the low end.

Apparently the industry reasons this way: Manufacturers and retailers are making precious little profit on the cheaper sets—but those sets are at least selling (BW—Aug. 21 '54, p 44), so marketers are wary of tampering with them. However, the luxury sets have been moving slowly, so why not jack prices on them, then put on a sales push to move them faster?

There are signs that the strategy is working. Philco reports a pickup in sales of its 24-in. consoles. Motorola had to increase production schedules for its 24-inches, and it noted a greater

interest in better-styled pieces. Westinghouse also believes there's a market for the big pieces—if you go after it.

The rush of financing plans as a sales incentive spread to another industry last week. Surface Combustion Corp., big Toledo manufacturer of industrial furnaces and industrial air conditioning, is offering what it thinks is the first formal deferred payment plan for this type of equipment.

Surface Combustion, like other industrial suppliers, has sold on credit before. Up to now, though, each deal has been negotiated separately. The new plan is a standing offer, at set terms, applicable on any purchase—whether it runs to a few hundred dollars or a few million. It aims to pull up sales, which have been off for the industry as a whole.

Under the plan, a customer puts down 25% of the purchase price, pays a straight 6% simple interest on the balance. This works out to about 3.25% of the purchase price for a 12-month deal, and a 3.08% for a 36-month deal.

Crosses the Sea for a Wee Fee



R. TAYLOR

AIR Parcel Post

flies with the Air Mail

VERA LOW COST! Send a one-pound package across the Atlantic for a little over two dollars.

CIRCLES THE GLOBE! International Air Parcel Post goes almost anywhere in the world in a few days. Makes overseas shipping fast and easy—only two simple labels to prepare.

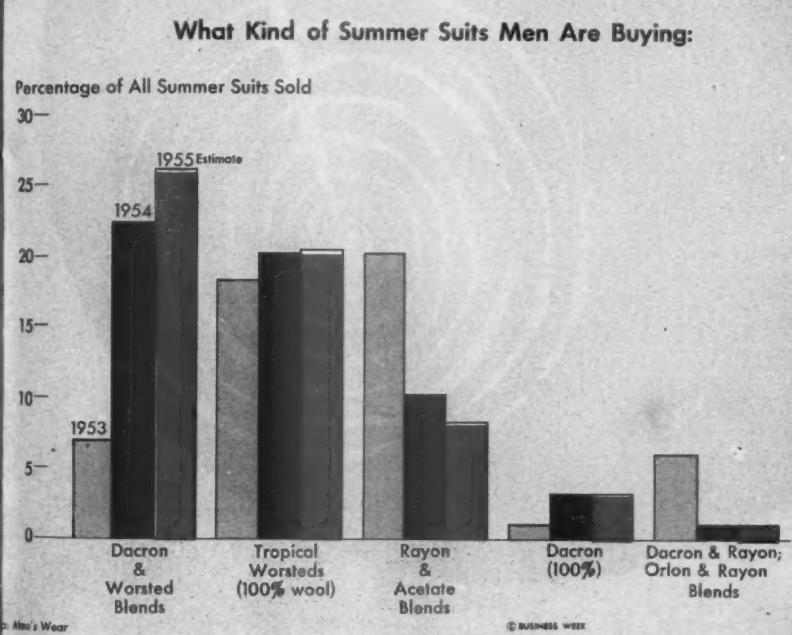
International Air Parcel Post gets priority handling all the way, and immediate delivery at its destination.

For more information and rates, call your Post Office.

USE . . .

AIR Parcel Post and Air Mail

Advertisement by the Scheduled Airlines as a public service for the U.S. Post Office



No Holds Barred

The trend to blends of natural and synthetic fibers in men's summer suit sales is stronger than ever.

This is pointed up in the above chart, based on Men's Wear magazine's latest survey of clothing retailers across the country. The biggest gainer: Dacron-

worsted blends, which spurted way ahead this past summer. Haberdashers think these will do even better next year.

Other natural-synthetic combinations also did well. Tropical worsteds remain a favorite. But straight synthetic suits—particularly rayon and acetate—showed poorly.

to men buying more chemicals than ever before:



caustic soda • soda ash • chlorine • sulphuric acid • sulphur • ammonia • nitrate of soda • bicarbonate of soda • nitric acid • sulphate of alumina • sodium chlorite products • ethylene oxide • ethylene glycol • diethylene glycol • triethylene glycol • polyglycols • dichloroethylether • ethylene dichloride • methanol • sodium methylate • ethylene diamine • hexamine

ore:



MAINSpring OF A CHEMICAL PRODUCER

Driving force in the burgeoning chemical market is an alert and aggressive management capable of quick, decisive action. At Olin Mathieson you can see these characteristics reflected in expansion, integration, and scope of production. They are *vital* to a continually growing number of important chemical consumers seeking flexibility in sources of supply...economies in transportation costs...locations for new plant construction...as well as broadened trade relations.

Olin Mathieson "know-how" supplements management in providing you with new tools for development. The merger makes available recognized experts in cellulose chemistry, arms, ammunition and explosives, metal fabrication, plastics and films. The Squibb research organization is world renowned in the field of medi-

cine and public health. Laboratories of the *Genesee Research* unit investigate chemical specialties. The *Powell Division* is noted for advanced work with insecticides and agricultural chemicals.

Coordinated research with chemical consumers is an additional aspect to be considered in reexamining your sources of chemicals. Your technical personnel can be backed up in many widely diversified fields by over 2,000 research specialists and the work of four major research centers.

With more industries buying more chemicals, an association with an alert, research-minded chemical producer is more important than ever before. Our executive office will gladly put you in touch with the men who can best serve your interests.

OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION
Baltimore 3, Maryland



ATLANTA 2, Georgia, 225 Chester Ave., S. E. CINCINNATI 2, Ohio, Dixie Terminal Bldg.

BUFFALO 3, New York, Rand Building

HOUSTON 2, Texas, Gulf Building

CHARLOTTE 2, N. C., Liberty Life Bldg.

LOS ANGELES 22, Calif., 2535 Eastland Ave.

CHICAGO 11, Illinois, 400 N. Michigan Ave.

NEW ORLEANS 12, La., Nat'l Bk. of Comm. Bldg.

NEW YORK 22, N. Y., 745 Fifth Avenue

PHILADELPHIA 7, Pa., Lincoln-Liberty Bldg.

PROVIDENCE 3, R. I., Hospital Trust Building

ST. LOUIS 2, Missouri, Rialto Bldg.

DO
YOU
Really
NEED
MORE
SALESMEN?

Whatever the size of your sales force, it must do two things; find prospects and sell them.

If your salesmen could spend more time *negotiating* with "live" prospects . . . less time *searching* for them — would you then need more salesmen?

Dodge Reports selling service gives you the benefit of a 1000-man field force highly skilled in performing one part of your sales job — *locating ready-to-buy prospects in new construction.*

This Dodge manpower combs every local market East of the Rockies to tell you daily — *what* construction projects are coming up . . . *who* you must see . . . *when* you must step in to land the business.

Let us show you how Dodge Reports can help you increase sales productivity — *without adding a single salesman.*

Send for FREE booklet.
No obligation, of course.



DODGE REPORTS

TAKE THE FIRST STEP IN EVERY SALE

Dept. B5413, 119 W. 40th St., New York 18, N. Y.

Timely accurate, news service East of the Rockies

phenomenal

"Results have been phenomenal. Actual orders resulting from the "clues" advertising total over \$27,000. Inquiries are from top management of well known companies".

A quotation from a letter written to us by just one of the many satisfied "clues" advertisers in the classified advertising section of BUSINESS WEEK.

You too can talk across-the-desk there to more than 255,000 key executives at a cost of only \$5.85 a line.

Are you missing something by not using "clues"?

MARKETING BRIEFS

Death of an ad agency: Cecil & Presbrey, rated by Advertising Age as the 32nd U.S. agency in size, will fold. It had two major blows: the recent death of James M. Cecil and the loss of a large chunk of business when another principal, J. D. Tarcher, moved out of the agency with some big accounts (including Benrus). Among the accounts that will be cast adrift are International Business Machines, Nestle, Marlboro.

Christmas softgoods sales will be at least up to last year's—maybe better; that's the forecast of 15 buying organizations interviewed by Dun & Bradstreet. The buyers, who serve over 1,200 department and specialty stores across the country, also think that: (1) Retail stocks will be lower; (2) sportswear will be the top seller; (3) sales will be best in the South, Southwest, and Midwest, in that order. As for hardgoods, the buyers are "somewhat less optimistic."

Premium promotion for books has been worked out between Doubleday & Co. publishing house and General Foods Corp. For 60¢ and box top from a Post cereal, you can get library-size editions of children's classics.

National Sales Executives, Inc., is sponsoring its fourth six-week tour to 19 foreign countries for representatives from 10 leading U.S. business firms. Idea is to exchange marketing and distribution information.

Candy consumption per capita dropped for the second year in a row in 1953, the National Assn. of Tobacco Distributors, Inc., reported this week. Sales rose slightly—to \$1.63-billion—but per capita expenditure on confectionery was down to \$10.11 for last year, 45¢ below the 1952 rate.

Frozen food is booming in England, with more than 20,000 stores now handling these items, and packers spending over \$3-million for plant expansion this year. That's the picture Quick Frozen Foods magazine publisher E. W. Williams brings back from a trip through European markets.

Beer and wine TV commercials will be de-dramatized, Michigan Assn. of Radio & Television Broadcasters has agreed. The group opposed a bill to ban displays of liquor drinking (the bill died in state legislature last session), but agreed to tone down the commercials through a voluntary ad code.

& Pres-
as the
old. It
t death
a large
er prin-
of the
includ-
ts that
ational
boro.

be at
better;
organ-
Brad-
e over
stores
that:
er; (2)
er; (3)
South-
er. As
"some-

as been
& Co.
Foods
from a
ize edi-

spon-
to 19
tatives
firms.
g and

ropped
1953,
o Dis-
Sales
ut per
ery was
5¢ be-

England,
s now
spend-
nsion
Quick
her E.
a trip

will be
Radio
agreed.
an dis-
ll died
(), but
mericals

9, 1954

Any way you figure— it's Marchant!



"It's for all
figurework"

"Our Marchant eats up division and multiplication—automatically. It's an adding machine as well. And for repeat addition and subtraction, a Marchant calculator is the fastest ever."



The fully-automatic
MARCHANT
Figuremaster



"It's easy to own"

"We're getting a Marchant on the 'pay-as-it-saves' plan. Now there's no budget problem — for less than the regular rental rate we'll soon own our Marchant."



"It's simple to use"

"If you can operate an adding machine you can run a Marchant. After less than an hour's instruction, I was turning out our figure-work in a fraction of the time it used to take."

YOU, too, will find a MARCHANT is so simple to operate . . . saves you so much time and money . . . and can be owned so easily . . . that you can't afford to do without one. ★ Call the local MARCHANT MAN for a test run on your own work.

MARCHANT
AMERICA'S FIRST
Calculators



Mail this coupon

Find out how a MARCHANT calculator will help cut your figure-work costs and lighten your figuring burden. Mail this coupon with your business letterhead for free . . .

Index to Modern Figuring by Marchant Methods
Descriptive Literature on Marchant Calculators
MARCHANT CALCULATORS, INC., OAKLAND 8, CALIFORNIA
B-10

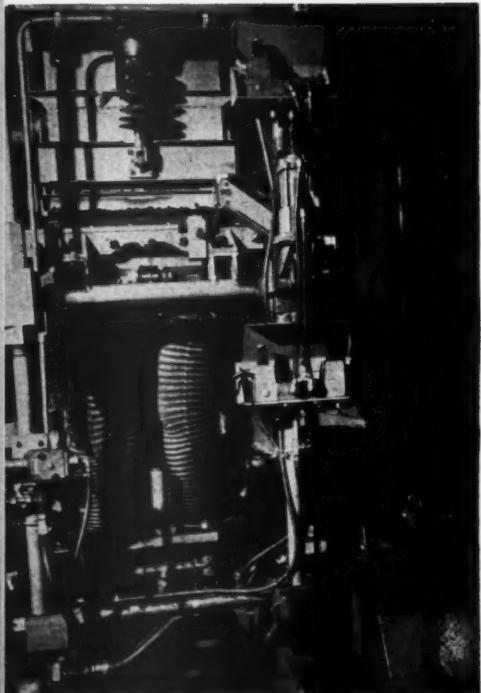
PRODUCTION



Pushbutton operation, the long-time dream of the metalworking industry, is practically here. Above are the master controls of the new automatic foundry of Eberhard Mfg. Co. in Cleveland.



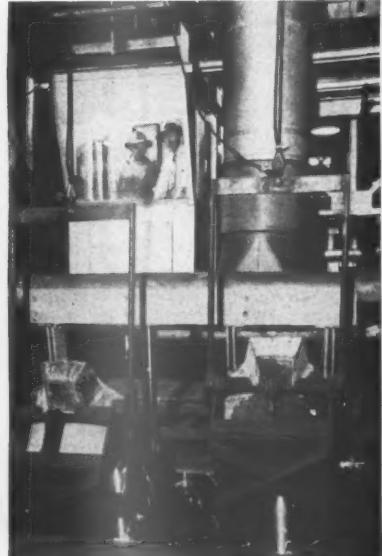
END OF THE LINE—The molds go round and round, and $2\frac{1}{2}$ lb. casting



HEART of the automatic foundry is this mold-making machine; it can be switched to a different pattern in half a minute.



CONVEYORS move top and bottom halves of mold side by side, then one is flipped over to form completed mold.



POURING of molten metal for castings is controlled by men in glassed-in booth; four molds are poured at once in 16 seconds.



lb. casting come out here—one every second.

by Pushbutton

Foundry operators were full of talk last week about a big new step in automation just completed by one of the fraternity. At the Cleveland plant of Eberhard Mfg. Co. (division of Eastern Malleable Iron Co.), iron castings, averaging about 2½ lb. each, were being shaken out of a completely automatic foundry at the rate of one per second (pictures).

• **Saving Men and Minutes**—Using the best conventional equipment, you would need about 40 men, many of them highly skilled, to achieve a similar production rate. The new Eberhard foundry needs only six men. Their job is to push buttons, watch the control panel warming lights, oil the mechanism. Savings on manpower alone are expected to run \$300,000 a year.

Besides cutting out a lot of back-breaking labor, the new setup minimizes problems of absenteeism, heat, fatigue, and training that are part and parcel of any large foundry's operation. It also goes a long way toward solving one of the industry's biggest problems: slow start and low production on the first

ings is
th; four
onds.

9, 1954

BUSINESS WEEK • Oct. 9, 1954



Blank Pages DON'T SELL!...



UTILIZE
CONTAINER
SPACE
FOR
ADVERTISING!

STONE's design and merchandising services can help you tell your product story in color with Multitone*. Have this effective additional selling power all the way through distribution . . . from factory to store to home. Examine your present shipping container. Packaging reevaluation can produce enough savings in labor, inventory and other expenses to pay the slight cost of blanketing your cartons with color and printing . . . a potent new merchandising medium.

Reevaluate your present shipping container.
Write for STONE's free Evaluation Check List.

* Exclusive registered process.



STONE CONTAINER CORPORATION

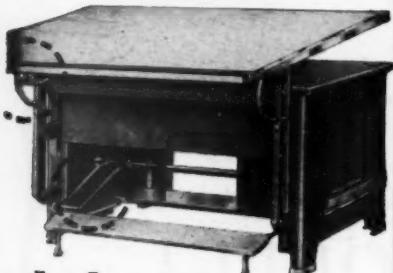
General Offices: Dept. B8 • 4200 W. 42nd Pl. • Chicago 32, Ill.

OTHER PLANTS and MILLS: Chicago, Ill.; Philadelphia, Pa.; Franklin, Ohio; Coshocton, Ohio; Pittsburgh, Pa.; Mansfield, Ohio; Mobile, Ala.

SALES OFFICES: New York; Philadelphia; Pittsburgh; Allentown, Pa.; Lancaster, Pa.; Baltimore; Wilmington, Del.; Akron; Cleveland; Columbus; Toledo; Lima, Ohio; Mansfield, Ohio; Sebring, Ohio; Kenosha; Chicago; Joliet; Grand Rapids.

Auto-Shift

TABLES



help get
the work done...

With 30-50% more
space efficiency!
With much less
draftsman fatigue!

• About 250 square feet accommodate two more Auto-Shifts than separate boards and desks. Auto-Shift puts a large reference surface and drawer right behind each draftsman for maximum space and operating efficiency. Note also the foot and hand releases (circled above) to adjust board height and slope instantly. Fully counterbalanced top moves effortlessly. Draftsman can change working position often—fatigue is sharply reduced—and the work gets done with Auto-Shift!

DRAFTING EQUIPMENT DIVISION

Hamilton

MANUFACTURING COMPANY
Two Rivers 2, Wisconsin



Mail coupon today for your free Auto-Shift booklet! All the facts, new sizes, new models for front and rear of row installations.

Hamilton Manufacturing Company,
Two Rivers 2, Wisconsin
Please send me the Auto-Shift booklet
(ADR-97)

Name _____

Firm _____

Address _____

City _____ State _____

...pouring is controlled by
pushbuttons from a glassed-in
control booth . . .

STORY starts on p. 130

day of the week, and a tapering off of production the last day of the week. Starting from scratch, a complete cycle takes less than 19 minutes.

• **Double Setup**—The new Eberhard installation was developed by Osborn Mfg. Co. of Cleveland. It actually consists of two molding units or production lines. They are adjacent to one another, can operate simultaneously or independently. They represent a capital investment of about \$600,000.

Heart of the new automatic foundry is a special mold-making machine; each production line has its own. This elaborate piece of equipment handles both the drag (bottom) and cope (top) of the metal flask (the frame in which the mold is made from a special sand). Each frame, or flask, has 12 compartments for molds, looking something like an egg box.

Alternately, the pattern for the desired product swings into position under the appropriate drag or cope (the bottom part of the frame is upside down at this point). One of the system's greatest virtues is the fact that patterns can be changed in half a minute. With scarcely a shutdown, the system can switch to different cast products.

• **Molds of Sand**—Sand flows into the flask around the pattern. It takes 14 seconds to fill cope or drag automatically, or 28 seconds for both parts. A metal strip brushes over the top of the flask to skim away excess sand or locate any shortage of sand. If the strip fails to contact any sand—indicating that there isn't enough of it—an automatic switch stops the line. Excess sand falls onto a vibrating tray under the mechanism and is carried back to a central sand room for re-use.

After the flask parts have been filled, they are jolted by the base 10 to 25 times to "set" the sand. Again excess sand drops to the vibrating trays. At the same station, pressure up to 100 psi. is applied to form the sand into a hard mold, and the sprue (pouring hole) is inserted in the top, or cope.

• **Top Plus Bottom**—At the next station, the pattern is withdrawn and the flask parts, alternately drags and copes, are lifted automatically onto a roller conveyor. At the same time the pattern is cleaned by air blasting and is swung back to its starting position for the next cycle. On the conveyor, a pneumatic pusher arm moves along copes and drags one flask length every 14 seconds, the time standard established at the sand-filling station.

From this conveyor, drags are picked up by a mechanical arm, turned right side up, and placed on a parallel conveyor. The copes move right on through, so that on the far side of this roll-over machine the two halves of the flask are moving parallel to each other on separate conveyors at different heights. If cores are required, they are inserted manually at this point. It's one operation the engineers, as yet, have not been able to mechanize completely.

The parallel conveyor lines feed into another elaborate piece of equipment known as a closing machine. In it, the cope is placed on top of the drag to form the completed mold (consisting of the hardened sand inside the metal flask).

• **Castings**—Now the stage is set for making the castings.

After two complete molds have been assembled, a pusher arm shoves them together into a two-ladle pouring station. At the same time, two molds from the adjacent production line are pushed into the same pouring station. Molten metal is brought to the pouring station via overhead conveyor from the cupola about 100 ft. away. A wheel-type locking device known as a weight-setting machine holds the two halves of the mold firmly together for the pouring. Pouring is controlled by push-buttons from a glassed-in control booth. All four molds are poured at the same time. It takes 16 seconds.

The molds containing the castings then enter a 27-ft. cooling conveyor. In 13 minutes, they emerge at the far end. Temperature has dropped from the ideal pouring temperature of 2,900 F to about 800 F. Suction fans pull waste gases outside.

The sand is then shaken away from the finished castings. Cope is separated from drag and automatically placed back into the feed line of the mold-making machine. Finished castings take off on another conveyor for the finishing operations.

• **Multiplying**—The Eberhard closed-circuit automatic foundry takes up a floor area 100 ft. long and 72 ft. wide. The sand delivery system is high: about 68 ft. But most of the system is only about 15 ft. high.

Each molding unit employs 50 mold flasks. Each has a cycle time of 18 minutes 40 seconds. Flasks measure 18 in. by 24 in. by 4½ in., with 12 compartments in each.

Each of the two units turns out about 150 of the mold-filled flasks per hour. That makes 300 per hour from the whole facility. Currently, 12 castings, each weighing about 2½ lb., are produced in each flask. The 12 castings per flask times the 300 flasks gives 3,600 castings per hour for a production rate of one per second.

• **How It Began**—Installation of the



A Caterpillar D8 crawler Tractor, which will push or pull up to 44,840 pounds.

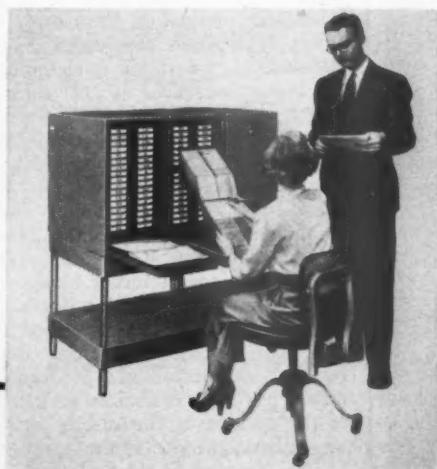
BIG PUSH in COST-CUTTING INVENTORY CONTROL

Caterpillar Tractor Company has pushed its inventory operation into higher gear with Kardex Visible Inventory Control. Caterpillar, using this system on the assembly lines and in nine strategically located Parts Depots, has profited from its immense value, both in production and in handling "rush emergencies" ... by having a customer's part where he wants it, when he wants it.

Kardex provides instantaneous reference to any of the more than 10,000 parts in the 23 ton giant you see above, and then some! Kardex keeps parts inventories constantly in balance... its Graph-A-Matic signals flash key facts on understocks and overstocks, promote "man-

agement by exception." When you add rapid posting to rapid reference, you can see why Kardex Inventory Control saves executive and clerical time and money ... how it helps assure the efficient customer service Caterpillar provides.

Kardex helps cut carrying costs on parts for all types of manufacturing concerns. Funds tied up in inventory investment are released for more productive use. And Safe-Kardex Certified Insulated Cabinets help protect every shred of essential inventory information from fire, at point-of-use, 24 hours a day, seven days a week... vital "insurance" on your insurance.



The 24 page book, "HOW TO GET PROFITS FROM INVENTORIES", thoroughly explains Kardex Inventory Control. For your free copy, just write Remington Rand Inc., Room 2042, 315 Fourth Avenue, New York 10, N.Y. and ask for KD375.

— **Remington Rand** —
PROFIT-BUILDING IDEAS FOR BUSINESS

locked
ight
con-
on
this
the
ther
rent
are
It's
have
ately.
into
ment
the
g to
g of
etal

for

been
hem
sta-
olds
are
ion.
our-
rom
neel-
ght-
elves
the
ush-
oth.
ame

ings
. In
end.
the
F to
aste

rom
ated
aced
old-
take
nish-

osed-
up a
wide.
out
only

hold
18
18
com-

out
per
rom
cast-
are
ings
600
rate
the

1954

marble

... good for *shariwaggi?**

What material could be better for effecting an honest and reasonable transition between old forms which have stood the test of time and new forms built to endure. The timelessness of Marble is one of its many virtues. It defies old age, laughs at the elements, resists hard usage, maintains its inherent beauty while other inferior materials are deteriorating with time.

Marble endures.

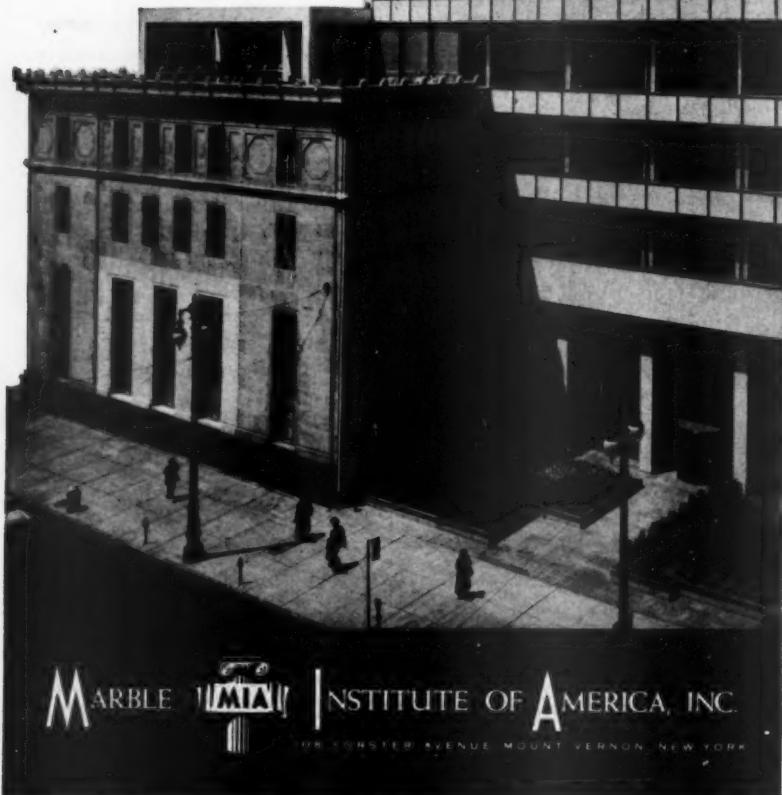
And Marble is economical, as has been CONCLUSIVELY PROVED in two important bulletins: "Proof That Marble Costs Less . . ."; "Further Proof That Marble Costs Less . . .". These are available without charge. Address requests to Department FS.

*Shariwaggi:

"A word from India describing the art of picturesque composition in combining new architecture with old so as to enhance both" Architectural Forum, February, 1954

Federal Reserve Bank,
Detroit
Smith, Hinchman & Grylls,
Inc., architects and
engineers
Minoru Yamasaki, design
consultant

Photo: Ezra Stoller



MARBLE



INSTITUTE OF AMERICA, INC.

108 FORSTER AVENUE MOUNT VERNON, NEW YORK

"... next closed-circuit, automatic foundry goes to Pontiac . . ."

STORY starts on p. 130

new equipment at Eberhard started in May but full production was reached for the first time last week. Osborn's development work on the closed-circuit foundry began in 1951. At that time, it delivered its first automatic core-making machine to a captive plant in the automobile industry.

The core maker had been developed in response to customer's complaints about the high cost of core making. Such work is generally performed by a team of six or eight workers. Osborn came up with a machine that was operated by just one man.

The Osborn core maker used a multiple station idea, where operations were performed simultaneously. It was only a short step then for Leon Miller, head of the machinery division, to come up with an idea for a mold maker. The first one of these was delivered to Buick about a year ago.

When the first core maker was developed, it threw the foundry out of balance by producing more cores than could be handled by the molding department. The new mold maker and closed circuit restores the balance in the molding, pouring, and shake-out areas, but leads to a bottleneck in the casting cleaning department.

The shake-out now gets rid of all the sand except that stuck in deep, irregular holes. This still has to be chiseled out. Osborn engineers are now working on a device, fitted with chisels, to do this job automatically.

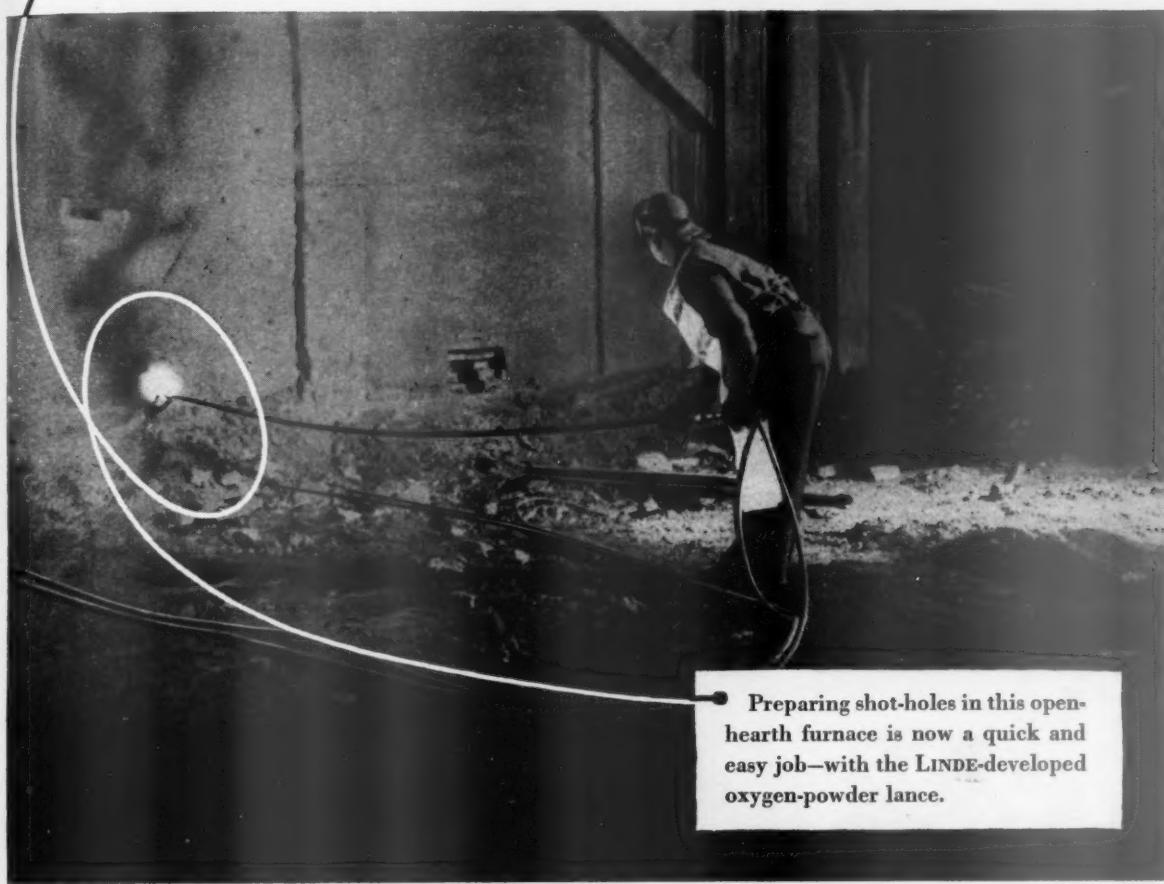
• **Missing Links**—Before the closed-circuit foundry could be built, however, two other important pieces of equipment had to be developed. One was the closing machine, which brings together cope and drag of the flask. The other was a reverse of the closing machine, to separate cope from drag at the shake-out point and reset the flasks in proper sequence on the conveyor leading to the mold-making machine.

• **Next**—Osborn has not done any talking about the Eberhard installation but news has spread rapidly. The next closed-circuit, complete foundry installation goes to Pontiac Motor Div. of General Motors. It will be used to produce castings of motor blocks.

The rate of production for motor blocks will, of course, be a good deal less than for 2½-lb. castings. But a two-unit system will still produce 300 molds per hour regardless of the size of the casting. If the casting needs a bigger flask, the size of the system can be engineered to fit the flask.

How Oxygen... and LINDE SERVICE*

BLASTED A BOTTLENECK IN MAKING SHOT-HOLES



Preparing shot-holes in this open-hearth furnace is now a quick and easy job—with the LINDE-developed oxygen-powder lance.

When rebuilding open-hearth furnaces, the brickwork and cinder must be blasted out. In the past, this meant using hand or wagon drills to make shot-holes for the charge, a slow and costly process. Built-in shot-holes were tried, but they were expensive to build and often became clogged with slag.

LINDE SERVICE set out to lick this problem. LINDE engineers, working with mill people, recommended a LINDE-developed oxygen-powder lance. Not only did the lance prepare shot-holes in record time, it also provided a quick and easy way to remove 'hard-spots'—sec-

tions of the lining that refused to crumble when blasted.

Today, the oxygen powder lance is proving itself to be a vital aid in rebuilding open-hearth furnaces.

*LINDE SERVICE

is the unique combination of research, engineering, and more than 40 years of accumulated know-how that is helping LINDE customers save money and improve production in their uses of oxygen and oxy-acetylene processes.

If your company uses oxygen, LINDE SERVICE can mean dollar savings to you. Let us tell you more about it.

LINDE AIR PRODUCTS COMPANY

A Division of UNION CARBIDE AND CARBON CORPORATION
30 East 42nd Street UCC New York 17, N.Y.

Offices in Principal Cities

In Canada: Dominion Oxygen Company
Division of UNION CARBIDE CANADA LIMITED



WHAT ARE YOUR
TOOL ROOM COSTS?



Save

up to **60%** in Steel Costs
with **MARSHALLCRAT**
LOW CARBON Ground Flat Stock

- It is easy to machine
- Grinds to a good finish
- Takes a good case
- Has excellent weldability

And compared to Tool Steel gives up to 60% savings in steel cost. Now you can use Marshallcrat for jigs, fixtures, patterns, machine parts or other pieces that require nothing more than case hardening. Over 190 standard sizes in stock ready for shipment. It will pay you to investigate.

A BAR, STRIP & PLATE GRINDING SERVICE

Write for catalog

MARSHALL STEEL CO.
P.O. BOX 100 W. LA GRANGE, ILLINOIS

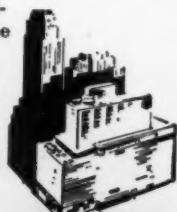
WEIGHTED PLATE, BAR, STRIP, PLATE, FLAT STOCK



CINCINNATI
you'll like the
NETHERLAND
or **TERRACE**

PLAZA HOTEL

Next time you're in Cincinnati, treat yourself to the all-round friendly hospitality of the famous air-conditioned Netherland or Terrace Plaza Hotel. You'll find perfect service and the most modern accommodations.



JOHN G. HORSMAN General Manager
owned and operated by
THOS. EMERY'S SONS, INC., CINCINNATI, OHIO



WEIGH OUT the right amount of natural rubber powder, and mix it with asphalt.



THEN SPREAD the mixture just as you would ordinary asphalt. The result is . . .

A Road of Natural Rubber

The work going on in these pictures is typical of a number of road construction projects over the U.S. these days. The workmen are laying a "rubber road."

Technically, it's an asphalt road, with just a pinch of rubber added to it—never more than about 5%. But that pinch is enough to make the new surface do things that ordinary asphalt never could.

For example, the road in the picture

will be about twice as hard to break, because it is more elastic. Also, it is less brittle at low temperatures. Added up, these things mean that such a road will last longer than an asphalt road that has no rubber in it. Maintenance costs will be lower.

• Newcomer—The rubber road idea is a relative newcomer to the U.S. The first road of asphalt and rubber was put down about five years ago near



phosphates

and formic acid help make better textiles



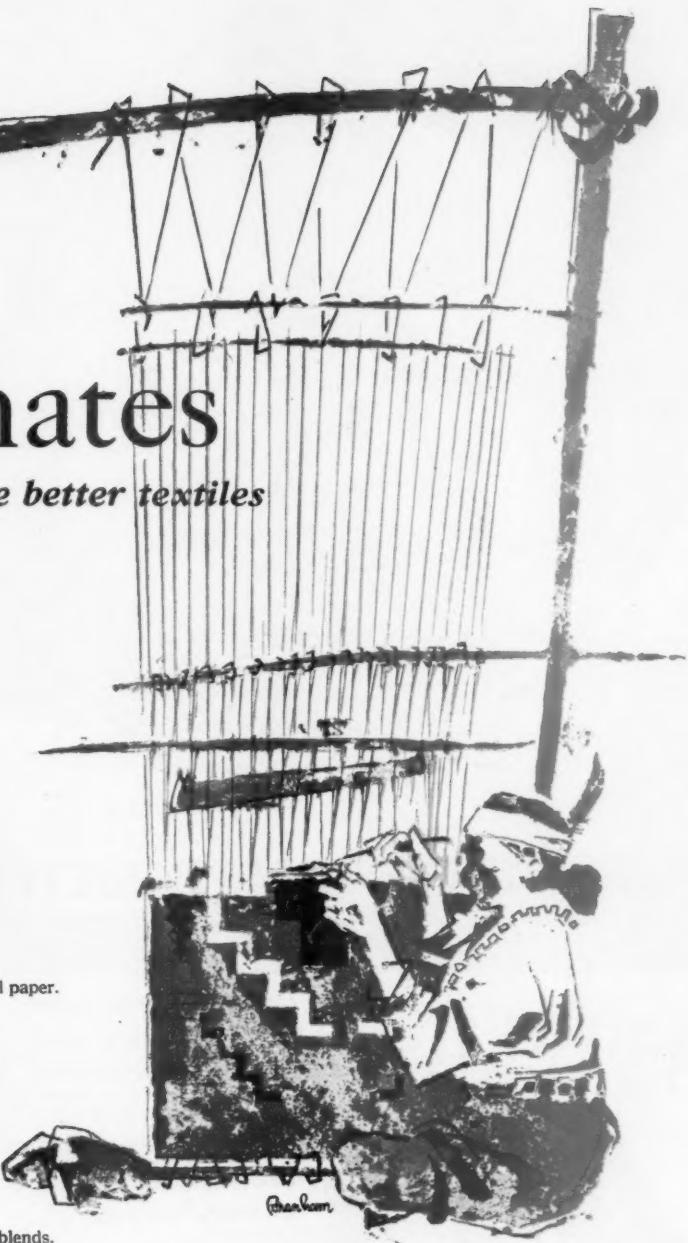
Formic acid—
Acidifying dye baths.



Ammonium phosphates—
Flame proofing textiles, wood and paper.



Diammonium phosphate—
Dyeing wool, Dacron-worsted blends.



Whether fabrics are woven from natural fibers or "spun out of a test tube," textile finishers benefit from Victor chemicals. From scouring wool to waterproofing nylons, from acidifying dye baths to stabilizing vinyl resins, Victor phosphates, formates and oxalates help do a better job. That is why the textile industry and more than 40 other industries find that . . . it pays to see Victor. Write Victor Chemical Works . . . 141 W. Jackson Blvd., Chicago 4, Illinois.

Or in the West: A. R. Maas Division, South Gate, Calif.

V **VICTOR**
Dependable Name in
Chemicals
for 56 Years

asphalt.



is . . .

per

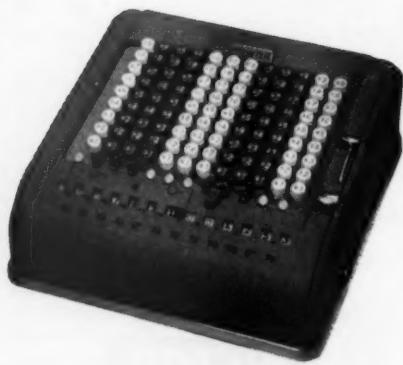
o break,
it is less
dded up,
a road
alt road
tenance

l idea is
S. The
ber was
go near

9, 1954



DUAL-ACTION COMPTOMETER®



The flick of a finger makes two machines out of one—one to calculate, the other to accumulate. Accuracy assured with 3-way Error Control—sight, sound and touch. Call your Comptometer representative.

COMPTOMETER ADDING-CALCULATING MACHINES are made only by Felt & Tarrant Manufacturing Co., and sold exclusively by its Comptometer Division, 1733 N. Paulina St., Chicago 22, Ill. Offices in principal U. S. cities and throughout the world.

Electric and non-electric models



Richmond, Va. Since then, some 30 states have experimented with the idea—usually on short stretches. Today, rubber roads in the U. S. probably stretch over no more than about 700 miles.

But this year has been the best so far, according to the Natural Rubber Bureau, Washington, D. C., which has been pushing the asphalt-rubber road in the U. S. since that first road was put down in Virginia. The bureau says that some 45 to 50 new rubber roads will be built this year. In three or four years, the bureau thinks it will have sufficient proof of the superiority of rubber and asphalt to talk most state and local governments into using it.

Eventually, says the bureau, rubber roads will gobble up 250,000 tons of rubber a year. That could mean quite a boost to the natural rubber industry. Going by last year's U. S. consumption figures, it would represent almost a 50% boost in the U. S. natural rubber market.

• Troubles—Two things are holding back rubber roads today. First, there's the lag that goes with the acceptance of any idea that needs years to prove its worth.

A town that has paved its streets with asphalt for years might be willing to put in a short stretch of asphalt and rubber—just to see how it works. But it won't pave the whole town until it knows just how well the new stuff works. That might take five years.

The second factor in the delay is cost. By adding that pinch of rubber to a batch of asphalt, you run the cost of the mix up to 25%.

But when you figure in such things as labor, which stays the same no matter which mix you use, the over-all cost of building a rubber road isn't really much higher than building a road of asphalt. And the bureau figures that the cost will come down still more once road builders start to use rubber on a big scale.

• Tank Test—And in the long run, it's a good bet that a rubber road will be much cheaper than asphalt, because maintenance costs will be lower. At least, that's the bureau's argument. As an example, the bureau cites the section of rubber road that runs between Amsterdam and The Hague, in the Netherlands.

The Dutch, who got interested in rubber roads long before U. S. builders, put that section in about 16 years ago. In the early days of World War II, the German army rolled over it when the Germans invaded the Netherlands. Four years later, the American army drove tanks over it, pushing the Germans out of the country. In those 16 years, the road has never needed maintenance; it is still in good condition.

some 30
the idea
Today,
probably
out 700

best so
Rubber
which has
per road
head was
Leau says
per roads
three or
it will
superiority
most
to using

rubber
tons of
in quite
industry.
umption
most a
rubber

holding
there's
eptance
o prove

streets
willing
alt and
s. But
until it
w stuff
years.
delav is
rubber
the cost

things
me no
over-all
d isn't
g a road
figures
ll more
rubber

un, it's
will be
because
er. At
nt. As
section
en Amer-
Nether-

sted in
uilders,
ars ago.
War II,
t when
erlands.
n army
the Ger-
those 16
main-
tion.



save money through cold heading design by **HARPER**

All the parts shown above were cold headed by Harper. The savings indicated were made over and above the cost of producing them by milled-from-bar or other processes.

Here are a few of the services Harper offers you:

1. A complete field engineering service to help you in the design of your product. Sales engineers in principal cities.

2. The widest experience in the field in working exclusively with non-ferrous, stainless steel and high temperature alloys.
3. Over 7,000 items carried in stock with Branch Offices and distributor warehouses in every major market area.

Let Harper help you solve your fastening problems. Mail the coupon.



**SPECIALISTS IN ALL
CORROSION-RESISTANT
FASTENINGS**
BRASS • NAVAL BRONZE
SILICON BRONZE • MONEL
NICKEL • COPPER
ALUMINUM • STAINLESS STEEL

The H. M. Harper Company
8225 Lehigh Ave., Morton Grove, Ill.

.....Please quote me on the attached part or make suggestions for redesign. (Blueprint attached.)
.....Please send catalog and have a salesman call.

Name.....

Company.....

Position.....

Address.....

City..... Zone..... State.....

What Do You KNOW ABOUT SAFES?



For instance, this is a Meilink double door safe with highest (A label) Underwriters' Laboratories rating. It gives maximum fire protection. Its inside dimensions are 60" x 33 1/4" x 21" and it takes up 9.83 square feet of floor space. For some companies, for some purposes, this is an essential business tool. For other firms, for other needs, a Meilink C or B Label safe is recommended. Which should you buy? Your Meilink dealer will help you decide. See the Yellow Pages or write Meilink Steel Safe Company, 1672 Oakwood Ave., Toledo 6, Ohio.

with **MEILINK** it's for keeps

Now with the new black-on-white
Agfa paper **Photorapid**

makes perfect copies in seconds!



SIMPLE—This newest development in photocopy machines, now available in one compact unit, 16 1/2" x 23 1/2" overall, with only one knob to turn, can be operated easily by any girl in your office.

HANDSOME—Glossy black with white trim—looks well anywhere.

ACCURATE—No matter how fine the detail, or what the colors, if you can see it in the original you will see it in the photocopy.

VERSATILE—Produces exact, letter-perfect copies up to 14" wide—whether the original is single or double sided, opaque or translucent, white or colored. Photorapid's legally accepted copies are ready for instant use, eliminating costly typing, hand copying and checking—or costly outside copying. With Photorapid you can make single side copies, double side (to reduce filing space), transparent copies for use as masters with diazo or blueprints, tissue copies for air mail—all at an unbelievably low cost. Also two-part models for copying from books without removing or injuring pages.

FAST—In seconds your finished, perfect copy is ready.

Write for
details

copy-craft

Dept. B-10, 105 Chambers St., New York 7, N.Y.

OFFSET USERS!
Photorapid transparencies make ideal
masters for use with the new positive-
working aluminum photostatic plates
... from original to offset press in 6
minutes or less.

PRODUCTION BRIEFS



High speed paint line: Douglas Aircraft Co.'s plant at Torrance, Calif., uses this 30-ft.-per-min. monorail system to carry jet aircraft parts from all over the shop and right through the paint operation. It dips into five different production locations, picks up parts without stopping. If fire breaks out, everything stops, paint flow is cut off, heat sources are killed, carbon dioxide sprays into all drains.

First LPG plant in New England is ready. Esso Standard Oil Co. will produce 1,000 bbl. of liquefied petroleum gas a day at the Everett (Mass.) plant. Previously, this market was fed from refineries in Louisiana and Texas.

Isotope lab for GM: General Motors said last week that it will use radioactive isotopes in peacetime engineering and research studies. A new lab near Detroit will go to work on tracer studies to find out more about such things as engine combustion, durability of paints, tool wear.

Atomic-powered airplanes: Kenneth Kasschau, atomic energy expert at American Locomotive Co., said last week that an atomic-powered plane would have to weigh 100 tons, develop 30,000 hp. But it wouldn't be the largest, most powerful plane ever built. The B-36 weighs 179 tons, develops 50,000 hp.

Chrysler Corp.'s new army contract—\$160.6-million to produce the Patton M-48 medium tank—puts the company back among the major tank builders. Defense contracts at Chrysler this year had been lagging far behind 1953.

Studebaker's new trucks will be up to \$100 cheaper than last year's. The announcement came on the heels of a \$37 to \$287 cut in Studebaker car prices.



FROM ITALY: a submarine for the adventuring skindiver. It can travel 60 mi.





the ad-
60 mi.

on a tank of fuel, can go down to a depth of 60 ft.

Two-Man Sub

This 15-ft. submarine—the Seahorse—is Italy's latest contribution to the undersea exploration craze fostered by skin diving (BW—Jul. 10 '54, p154). It can carry two people, has a range of 60 mi. Its top speed is 8 knots. The farthest depth to which it can go is about 60 ft.

Short of Breath—It is powered by a 9-hp. internal combustion engine. That, in itself, is a somewhat radical departure. No big submarine would be equipped with such a power unit. It wouldn't be practical because the internal combustion engine needs air, must stay close to the surface to get it. For that reason, you find the big subs using electric motors and batteries for power. Such a unit needs no air, can therefore go to greater depths than the Seahorse.

But the Seahorse discarded the electric motor to save on weight and size. As a result, it displaces just under a ton of water. With batteries and a motor, it might weigh twice that much, and its length would have to be much more than 15 ft.

Of course, the Seahorse engine has that one drawback: It has to have a pipeline to the water's surface. And the depth to which it can go is limited by the length of the pipeline.

The Seahorse has two tanks in its midsection that are used to take it below the surface and to position it vertically once it has immersed. The two-man crew uses underwater breathing devices when the vessel is cruising below the surface. These have sufficient

FOR THE LATEST IN PACKAGING

...look to Package®



SUPER MARKETS

are installing this new "Package" machine to wrap all kinds of prepackaged meat and luncheon items in trays or on cards. Saves labor and enables them to wrap meat as needed—not days in advance. The meat looks fresher—sells faster.

FROZEN FOOD manufacturers can now wrap up to 160 packages a minute on this fast machine, built to tie in with their high-speed filling machines. Its advanced design results in neater, more attractive packages and a machine that is easier to adjust and clean.



TEXTILES

in great variety are being wrapped on this new machine. Accommodates any package from 4" to 16" long, 2" to 9 1/2" wide and 1" to 5 1/4" high. Two hand-wheel adjustments set it for a given size.



New developments constantly coming off our drawing boards offer real opportunities for increasing the sales appeal of your package and for cutting costs. Whether you wrap, bag or carton your product, get the benefit of our 40 years of experience in serving leading package-goods manufacturers.

*Write for descriptive folder
on our machines*

**PACKAGE
MACHINERY COMPANY**
SPRINGFIELD, MASSACHUSETTS

NEW YORK PHILADELPHIA BOSTON CLEVELAND CHICAGO ATLANTA DALLAS
DENVER LOS ANGELES SAN FRANCISCO SEATTLE TORONTO MEXICO, D.F.



Trane Unit Heaters used in the smoke tests shown below

How to put
want

split it... beam it... spread it...



SMOKE TESTS prove versatility of TRANE
Unit Heaters with patented Louver Diffusers.

out
ant
heat where you
it...without moving the heater

*Trane Unit Heaters with exclusive
patented diffusers let you "shape"
heat flow into many patterns*



Each diffuser fin adjustable!

Now when your production layouts or comfort requirements change you can *reshape your heating pattern without moving the heaters!* You save time, avoid the expense of relocating heaters and piping.

TRANE Unit Heaters with exclusive patented TRANE Louver Diffusers give you completely flexible and accurate control of your heat distri-

bution. You can deliver warmth in any desired direction and in any proportion—even in different directions and proportions at the same time. And you can change the pattern at any time with a simple fingertip adjustment!

Personnel problems are fewer, since comfort can be adjusted to individual needs. Budget problems are eased, because heating patterns can be shaped and changed *after* heaters are installed.

Plan now to incorporate this flexibility and economy into *your* plant heating system. Just call your nearest TRANE Sales Office or write TRANE, La Crosse, Wis., for Bulletin DS-327-B.

TRANE

manufacturing engineers of

AIR CONDITIONING, HEATING

ventilating and heat transfer equipment

The Trane Company, La Crosse, Wis. • Eastern Mfg. Div., Scranton, Pa. • Trane Co. of Canada, Ltd., Toronto • 90 U.S. and 15 Canadian Offices.



Air conditioning costs are less when TRANE UniTrane units are used. Each occupant controls his own climate. Units can be shut off in unoccupied areas! Single pipe circuit handles chilled water for cooling, hot water for heating.



For comfort or process cooling in large installations, this TRANE CenTraVac chills huge quantities of water economically. Starts, stops, runs unattended. Automatically limits use of electric power to cooling requirements.

BAY STATE
WHEELS of PROGRESS

NEW
SAF-T-CUT "BZ"
• Reinforced Disc-Wheel

Fiberglass Reinforcement Specially treated Nylon Mesh

Layers of Fast Cutting Abrasive Fiberglass to support area around hole and hub

PROGRESS for real "POWER" grinding!

Again, BAY STATE brings faster, safer portable grinding . . . with NEW Saf-T-Cut "BZ" disc-wheels.

"BZ" is extra strong, for extra heavy-duty stock removal, with faster cutting action and longer wheel life.

Saf-T-Cut "BZ" is the latest BAY STATE "Wheel of Progress"



Ask for a demonstration on your work.

BAY STATE ABRASIVE PRODUCTS CO.
Westboro, Mass., U. S. A.

Branch Offices and Warehouses:
Chicago, Cleveland, Detroit, Pittsburgh
Distributors: All Principal Cities
In Canada: Bay State Abrasive Products Co.
(Canada) Ltd., Brantford, Ont.

oxygen for about three hours of underwater cruising.

• **Down and Back**—Here's how an underwater cruise would go: The Seahorse sets out with both tanks empty. So long as they are empty, it cruises along the surface. When the crewmen want to submerge, they clamp on their breathing devices and open one tank.

The tank fills with water in a matter of seconds and the Seahorse sinks to a few feet below the surface. When they want to go deeper, the crewmen let some water into the second tank.

All the while, the engine is breathing through its ship-to-surface pipeline. The surface end of this line is kept above water by a buoy, which bobs above the water level when the vessel is under way. The manufacturer of the Seahorse—Cosmos Co., Perugia, Italy—claims that water can't get into the engine through this air-intake pipe. Special automatic safety devices are said to keep the engine dry.

The buoy has a second function: If the crewmen want to leave the sub for some underwater exploring, the buoy keeps the vessel from drifting away.

When the crewmen want to surface, they flip a pair of switches that force compressed air into the two water tanks. This pushes the water out.

• **One-Passenger Cruises**—The manufacturer says that the unit shown in the pictures has cruised during the past summer between Genoa and Portofino—a distance of about four miles. In Italy, the Seahorse sells for \$2,950 (1.8-million lire). Delivered to the East Coast of the U. S., its price would be about \$3,250.

• Source: Cosmos Co., Perugia, Italy.

snow up into the truck can be rotated through 180 degrees. This makes it possible for the operator to load the truck from either side, or from dead ahead.

The plow can be mounted onto almost any wheel-type front-end loader, such as the one shown in the picture. Or it can be mounted on a four-wheel-drive Jeep.

• Source: Wm. Bros Boiler & Manufacturing Co., 1057 Tenth Ave., Minneapolis, Minn.



Plastics for Housing

Polyethylene film, the plastic material used to package carrots, potatoes, and dozens of other items, is crashing a new market: construction. This move may solve the looming problem of too much polyethylene capacity—expected when several major chemical companies enter the field (BW—Apr. 10 '54, p.100).

In construction, polyethylene film will be used as a barrier against moisture. The workmen in the picture above are laying a sheet over sand. Pipe for radiant heating will be placed on top and a concrete slab poured over all. The film has to be laid on sand, which protects it from ground projections and sharp objects. But there's no need for gravel or stone base.

Visking Corp., major extruder of polyethylene film, also sees a big market for the material as a moisture and dust barrier in walls, as flashing around windows, and as a dust barrier over subflooring. In such cases, the film is attached to the studding or floor with staples.

Visking makes the film in seamless sheeting in widths up to 16 ft. For walls, it recommends a thickness of .002 in.; for under slabs, a thickness of twice that. Average price runs about 1½ per sq. ft. in fairly large quantities.

• Source: Viskin Corp., Plastics Div., Terre Haute, Ind.



Snow Eater

This new rotary plow attachment tosses three to four tons of snow into the truck in a minute. The manufacturer, Wm. Bros Boiler & Mfg. Co., claims that it can plow deeper snow than bigger rotaries with ten times its 30 hp.

The curved chute that carries the

HAMMERMILL BOND

Looks Better! Types Better! Prints Better!

3 big reasons why more business today is done on Hammermill Bond

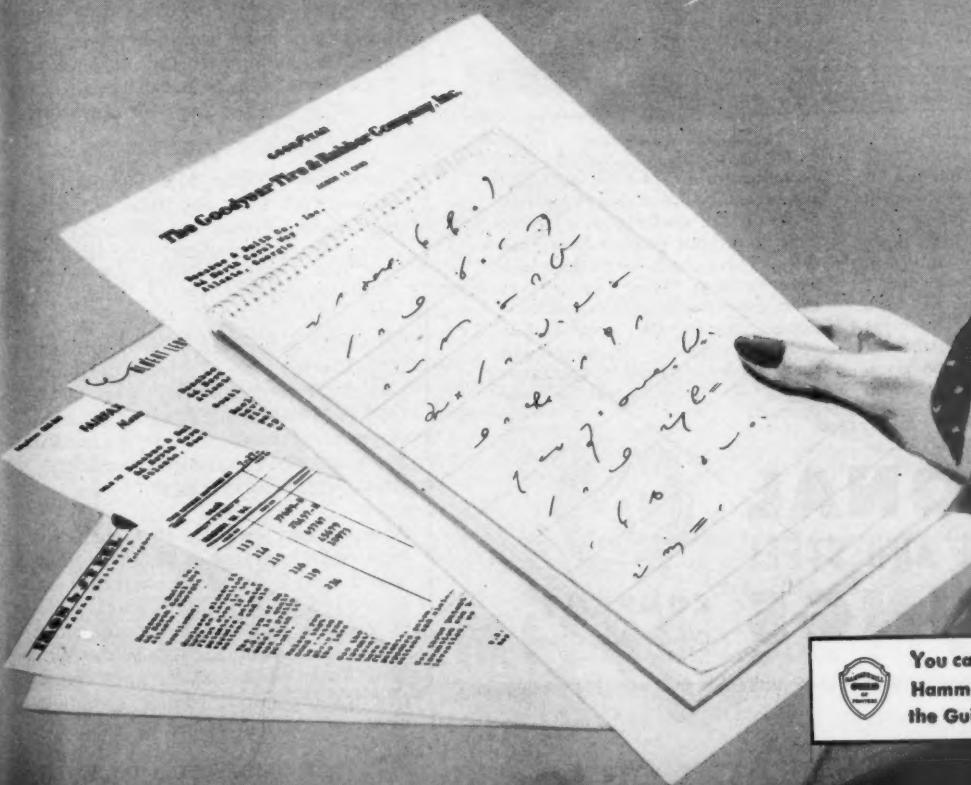
Look through your mail any morning. Chances are you'll see the Hammermill watermark more often than any other. Compare the features that make Hammermill Bond the preferred office paper—as it has been for 42 years. Note the attractive, sparkling blue-white! See how much more readable it makes typing and how its smooth, uniform surface permits clean, inconspicuous

erasures! Then talk to your printer. He'll tell you he can deliver better-looking letterheads, envelopes and business forms on Hammermill Bond.

We'll send you free the latest Hammermill Bond sample book. It shows the brilliant blue-white and twelve "Signal System" colors. Write today—on your business letterhead—to Hammermill Paper Company, Erie, Pa.

**HAMMERMILL
BOND**

FOR OVER 40 YEARS...
AMERICA'S MOST USED BOND PAPER



You can obtain business printing on Hammermill Bond wherever you see the Guild shield on a printer's window.



PEARLITIC MALLEABLE CASTINGS

when
operating
conditions ...



If service conditions are unusually rugged and you're troubled by high manufacturing costs—look to pearlitic malleable castings!

Pearlitic malleable has high fluidity that casts easily into complicated shapes. It resists wear under heavy loads at high speeds . . . has high ultimate strength . . . possesses excellent non-seizing properties for bearing surfaces . . . can be given a very smooth finish where desired . . . and can be either liquid quenched

or air quenched. And perhaps most important of all, pearlitic malleable machinability index ranges from 80 to 90 (B1112 steel = 100).

So look your product over critically. Then check pearlitic malleable castings. They can replace more expensive methods of fabrication or manufacture . . . can lead to reduced weight, less machining time . . . fewer assembly operations . . . greater sales appeal for your product.

AA-166

NATIONAL MALLEABLE AND STEEL CASTINGS

The Nation's largest independent producer of malleable and pearlitic malleable



COMPANY
Cleveland 6, Ohio



Mass Hearing Check

This audiometer can check the hearing of 40 people at a time. According to the manufacturer, Beltone Hearing Aid Co., it has fewer component parts than any unit on the market today: one tube and one voltage regulator, where other units have from three to 11 tubes.

Also, says Beltone, it is the lightest unit on the market. Weight: under 11 lb. Price: \$350.

• Source: Beltone Hearing Aid Co., 2900 W. 36th St., Chicago, Ill.

NEW PRODUCTS BRIEFS

Another atomic battery: Monsanto Chemical Co. said last week that it had developed a 1½-in.-long unit that uses energy from the radioactive element, polonium. It can produce as much power as an ordinary dry cell, but its cost is still too high for large-scale manufacture.

Three-in-one-butcher tool: Delsom Co., Wilmington, Del., has come out with a meat cleaver that can chop, saw, or tenderize a slab of steak. The stainless steel saw is said to go through frozen meat with ease.

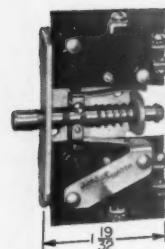
All-plastic milk truck body: Carnation Milk Co. has ordered a truck of fibrous glass reinforced polyester from Strick Co., the Philadelphia truck-trailer manufacturer. The plastic body is expected to have greater insulating efficiency than present-day trucks.

A new rotary card file that enables a clerk to find any one of 80,000 or more record cards in 3 to 4 sec.—and that can be worked by as many as three clerks at the same time—has been announced by Mosler Safe Co., 320 Fifth Ave., New York. The manufacturer claims that it's the fastest volume card-filing device on the market today.

MICRO SWITCH Precision Switches

A PRINCIPLE OF GOOD DESIGN

**It's not
a switch
... it's
THE
switch**



safety interlock—
fungus-proof—
shock-resistant

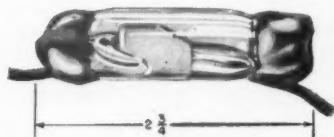
A MANUFACTURER of Navy electronic equipment wanted a switch to insure the utmost safety of equipment and personnel when doors of a high voltage cabinet were opened. That was easy. MICRO SWITCH engineers had solved that problem long before with a small, dependable door interlock switch that couldn't be cheated. But that wasn't enough—THE switch required by the Navy had to be fungus- and corrosion-proof. It had

to operate in wide temperature ranges and be immune to extreme shock and vibration. MICRO SWITCH quickly developed the switch to meet all these requirements.

Perhaps you or your design staff have a problem that only THE switch can meet. Field engineers at 16 MICRO SWITCH branch offices can put a wealth of switch experience to work with you.

Why not call today?

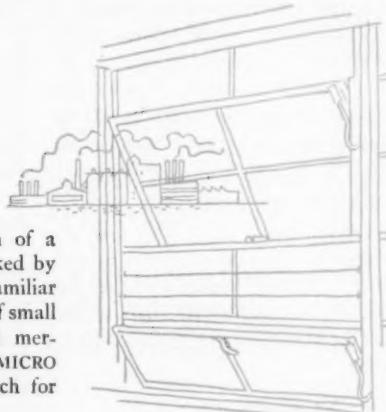
that designers get from MICRO SWITCH



tilt operated—
low energy circuits—
glass sealed

WHAT kind of a switch will serve you best? Sometimes it's a mercury switch. That's what American District Telegraph engineers decided when they picked Honeywell Mercury Switches to operate burglar alarms when tilt-type windows were opened at improper times. The glass-sealed enclosure kept the switch in perfect working order for the emergency which might never come.

Why not have your selection of a switch for your application checked by engineers who are thoroughly familiar with the advantages of all types of small switches—both snap-action and mercury? It's another reason why MICRO SWITCH can give you THE switch for your job.



A complete line of snap-action and mercury switches



MICRO SWITCH

A DIVISION OF MINNEAPOLIS-HONEYWELL REGULATOR COMPANY
FREEPORT, ILLINOIS



MICRO SWITCH provides a complete line of extremely reliable, small-size, high-capacity, snap-action precision switches and mercury switches. Available in a wide variety of sizes, shapes, weights, actuators and electrical characteristics. For all types of electrical controls.



—BUT we are just a little proud of our reputation for delivering Raymond Multiwalls *when promised*. In fact one of our customers told us that we ought not to hide our light under a bushel.

Of course there are other features of Raymond service equally important. For example, Raymond Multiwalls are scientifically engineered to meet the exacting requirements of almost every industrial product; to assure its safe delivery from bagging machine to buyer.

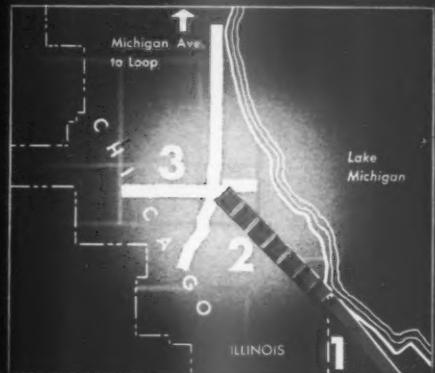
Wherever you are, call in a Raymond man and let him discuss *your* shipping needs from every angle. Our long experience in adapting container to contents may actually reduce your bagging costs. THE RAYMOND BAG COMPANY, Middletown, Ohio. Phone 2-5461.

Raymond
MULTIWALL PAPER
SHIPPING SACKS

LOCAL BUSINESS

Chicago Plans a Skyway... ...and may create a bottleneck

1. The Indiana Turnpike ...
2. Will funnel cars across planned Skyway ...
3. Into downtown traffic snarl.



CHICAGO BUSINESSMEN TALK ABOUT... Traffic Indigestion and Voting Headaches

It seems that the more you stir the traffic pot in this city the gummier things get. Last week the talk in town revolved around the roadway indigestion that may come when cars pour in from the Indiana Turnpike (map, above). Mixed with the heated traffic debates were angry comments about the lopsided voting picture in Illinois. Chicago has 52% of the state's population but only 19 of the 51 legislative districts.

The already murky traffic picture was clouded by an announcement from Indiana that the \$280-million Turnpike (slated for completion in 1956) would dump cars and trucks right in Chicago's lap. The extreme southeast corner of the city, where the pike will end, is a traffic engineer's nightmare. There are old, narrow streets, a maze of industrial plants, and a waterway to be bridged.

• **Relief**—Something had to be done. The only apparent solution seemed to be the construction of a 7-mi. elevated toll expressway to connect the turnpike with Michigan Boulevard and the Loop. The project, called the Calumet Skyway, will cost approximately \$80-million.

But some feel that the new skyway (capacity 40,000 cars a day) will just move the bottleneck from the outskirts right into the center of town. Some businessmen say that bringing more cars downtown is not the answer. They maintain that a belt highway, ringing the city, should be considered with

stress on public transportation into town.

• **One of Many**—The Indiana Turnpike headache is only one of many that plague city planners. The state's Toll Highway Commission is studying a report urging construction of a \$387-million turnpike system. This would give Chicago the badly needed belt line around the city to divert cars from crowded downtown streets. So far the plan is still in the talking stage.

Downtown parking is almost impossible, so the city is building garages. The first was completed last month but proved to be somewhat of a disappointment. It averaged only 2,315 cars daily; an average of 3,000 is needed to meet expenses. Authorities say that it will take drivers awhile to get into the garage-parking habit—that's why \$100,000 was set aside from the original bond sale to be used as working capital during initial operations.

Maybe it's the 80¢ parking fee, or maybe it's the inconvenience—but Chicagoans are not using the city-owned garage enough. Some people are wondering what's going to happen when five other city-owned garages, now under construction in and around the Loop, are opened for business.

• **Bothered**—Traffic snarls and no-parking signs all over town are annoying Windy City residents, but "taxation without representation" in the state legislature really makes them hot under the collar. Chicago's population dominates the state, but rural sections have



A message to men who are PAID TO WORRY

We mean the kind of worrying that results in a better product. Maybe at a better price. Or at least the same price. Or with more sales appeal.

You're an executive. President of your company. A v.p. in charge of production. A v.p. in charge of engineering. A v.p. in charge of sales. A sales manager. An engineer. A product designer.

You're worried about costs. Product appeal. All the things that affect your business.

Sit down with us for a moment and look at your product. Look it over carefully.

Have you ever considered making it out of Enduro Stainless Steel?

Probably not, because of the initial cost. That's what most manufacturers say. But those who have followed through with Enduro Stainless Steel have found out that this isn't true.

What you can save on production, plus what you add in sales appeal or long life or both, can more than offset the initial price of Enduro Stainless Steel.

This isn't a lot of dream talk. We have cases in our files to prove what we're saying. Cases where customers changed to Enduro Stainless Steel, paid a little more for its advantages, and ended up with a product that actually cost them less.

One thing more. We don't just sell you Stainless Steel. We show you how to use it. So you get everything you buy. Our metallurgists work with yours. And since Republic makes the widest range of steels and steel products, you get our unbiased opinion. If you shouldn't use Enduro, we'll tell you so in the beginning.

Consider using Enduro Stainless Steel. And remember. A slight switch in your thinking may mean a big boost in your profits. And that's what we're talking about, aren't we?

Let's get together. Soon. Have your secretary call your nearest Republic Sales Office. The time to do it is now.

REPUBLIC STEEL CORPORATION

Alloy Steel Division • Massillon, Ohio
 GENERAL OFFICES • CLEVELAND 1, OHIO
 Export Department: Chrysler Building, New York 17, New York

REPUBLIC
ENDURO STAINLESS STEEL



into
urn-
that
Toll
re-
mil-
give
line
rom
the
pos-
ges.
nth
dis-
315
ded
hat
nto
why
inal
ital
or
Chin-
ned
on-
men
un-
the
ark-
ing
on
ate
der
ni-
ave

LOOKING FOR A BUILDING?

If you are, take a look at this list of available structures in "The Central South, where industry goes... to work." You may find the very building you need. The Industrial Development Department of The Nashville, Chattanooga & St. Louis Railway has complete information on these and many more buildings in the Central South. Write today for full particulars... without charge or obligation, of course.

Just Address:

G. G. Barbee, General Industrial Agent
The Nashville, Chattanooga & St. Louis Railway
203-A Union Station
Nashville, Tennessee



Location	Sq. Ft.	Construction	No. Floors	Dimensions Long x Wide	Type of Floor	Condition	R. R. Siding
Chattanooga, Tenn.	38,406	Brick & Steel	1	223' x 173'	Concrete	Good	Yes
Chattanooga, Tenn.	16,000	Brick & Steel	1	200' x 80'	Concrete	Good	Yes
Nashville, Tenn.	62,000	Brick & Concrete	2	320' x 100'	Con. & Wood	Excellent	Yes
Nashville, Tenn.	20,000	Brick & Concrete	4	100' x 50'	Concrete	Excellent	Yes
Nashville, Tenn.	49,000	Frame & M. C.	1	301' x 127'	Wood	Good	Yes
Union City, Tenn.	20,000	Block & Metal	1	200' x 100'	Concrete	Good	No
Somerville, Tenn.	30,000	Block & Brick	1	200' x 150'	(partially complete)		No
McMinnville, Tenn.	36,000	Concrete Block	2	130' x 140'	Con. & Wood	Good	Yes
Dickson, Tenn.	15,000	Brick & Concrete	1	200' x 75'	Concrete	Good	No
Atlanta, Georgia	79,516	Brick & Concrete	4	148' x 140'	Con. & Wood	Fair	Yes
Atlanta, Georgia	38,422	Brick & Concrete	3	114' x 84'	Concrete	Excellent	Yes
Atlanta, Georgia	104,921	Brick-Mill Type	5	85' x 73'	Wood	Excellent	Yes
Atlanta, Georgia	39,762	Brick-Mill Type	3	282' x 47'	Wood	Good	Yes
Atlanta, Georgia	31,500	Brick-Mill Type	3	210' x 50'	Wood	Good	Yes

By the way, do you have your free copy of "The Central South, where industry goes... to work", the colorful new brochure that shows you why the Central South must be considered in any plan to relocate your plant or build a branch? If you haven't, write for it today.



THE NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY

most of the voting power. For years, Chicagoans have chafed under their progressive disenfranchisement.

This is what happened: Illinois' antiquated constitution provides that the legislature revamp its districts every 10 years on the basis of population. But for 53 years the downstate-dominated legislature has ignored the growing population in Cook County and Chicago. Now, a reapportionment amendment is on the fire.

If passed, the amendment will be a compromise. It will give Cook County 24 seats in the senate, downstate sections 34 seats. But the house will be vastly shaken up. Cook County will get 30 districts (three members each), downstate only 29.

Business Gets the Bird

BALTIMORE—When the Cleveland Indians were buried and the baseball season came to an end, businessmen in baseball cities began to add up the tally for the year.

Last week the Baltimore Chamber of Commerce received shocking news. The Orioles' return to the big time did not bring in the expected business boom. A few merchants and the team itself showed tidy earnings, but the rest of the city was left out.

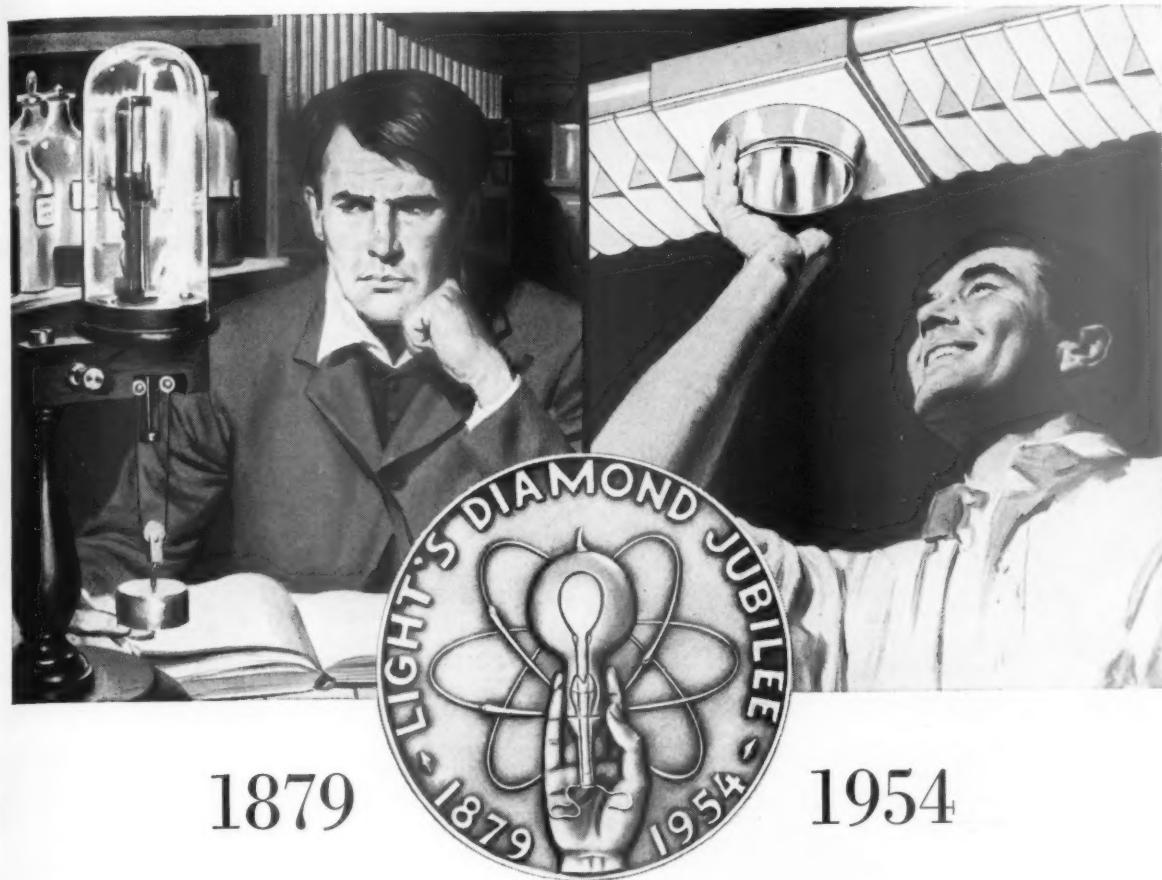
The Orioles took in more than \$1.5-million from 1-million customers. Concessionaires at the stadium and parking lot attendants also cashed in. Buses and taxis did moderately well, but department stores apparently did not get an extra nickel. Railroads showed a small increase in ticket sales (attributed to Orioles games in New York).

Restaurant owners said Sunday doubleheaders hurt them because the contests bridged the entire dinner hour. It cost the team \$250 a night to light the stadium, so the Consolidated Gas & Electric Co. made a little extra money. Newspaper circulation pepped up a bit, but on the whole business was "unexpectedly mild."

"Maybe if the birds get hot next year—we might have better profits," a downtown businessman said hopefully.

CLEVELAND—This city really took a shellacking because of the unexpected twists of baseball. The Cleveland Baseball Club had to refund more than a half-million dollars worth of tickets because the series ran through only four games. The club's share of the series' profits: practically nothing. The players split the earnings of the first four games and the clubs are supposed to get the rest. Hotels took a drubbing by the sudden exodus, and concessionaires are still eating the mountains of wasted hot dogs. Total lost to the city: nearly \$2-million—because of no Sunday game.

During this Diamond Jubilee of Light...



1879 1954

Sylvania seeks still greater **LIGHTING PROGRESS**

Since 1901, Sylvania has pioneered in the development and improvement of incandescent lighting. Year by year, improvements in materials, methods, and testing techniques have brought about the Sylvania bulbs, well known today as "The Best Light in Sight."

In 1939, Sylvania introduced its first fluorescent lamp. And again, continuous laboratory research and improved methods have paid off in far superior

products . . . lamps which give more lumens of light per dollar throughout their life.

And today, at the 75th anniversary of electric light, Sylvania lighting engineers are working toward still greater achievements . . . endeavoring to bring still more efficient and more economical light to homes, schools, commercial and industrial organizations throughout the world.

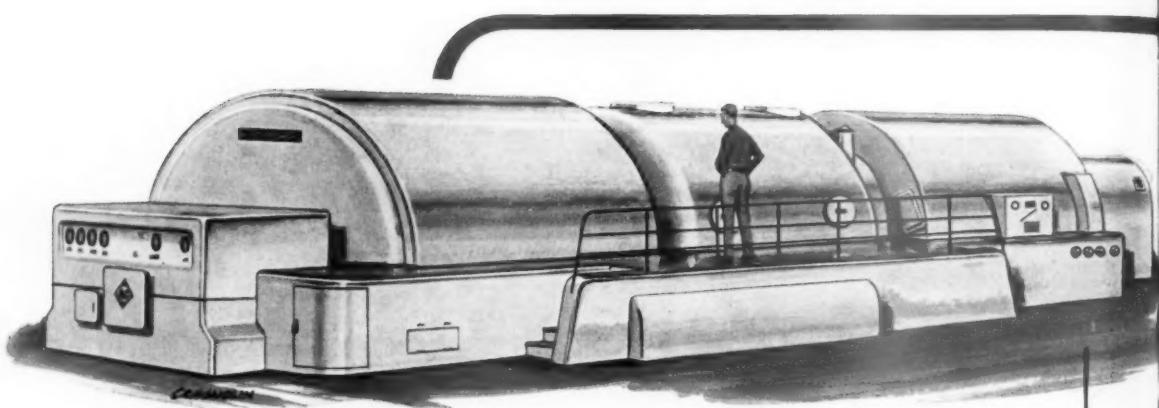
SYLVANIA

Sylvania Electric Products Inc., 1740 Broadway, New York 19, N. Y.

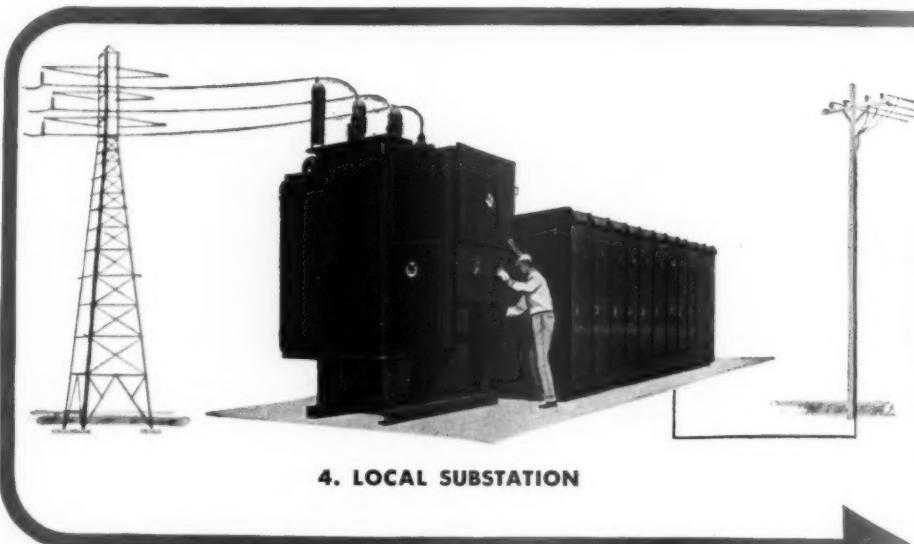
In Canada: Sylvania Electric (Canada), Ltd., University Tower Building, St. Catherine Street, Montreal, P. Q.

LIGHTING • RADIO • ELECTRONICS • TELEVISION

These are the things that bring you light



1. STEAM TURBINE-GENERATOR



4. LOCAL SUBSTATION



5. POLE TRANSFORMER

ALLIS-CHALMERS
Salutes Edison's Great Invention—
the Incandescent Electric Light
on its 75th Anniversary.

**LIGHT'S
DIAMOND JUBILEE**
Celebrates 75 Years of Progress
in Electric Living.

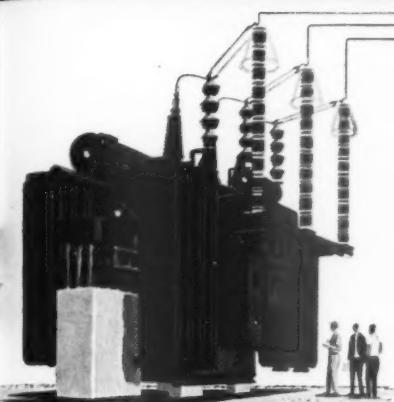


C-5639A

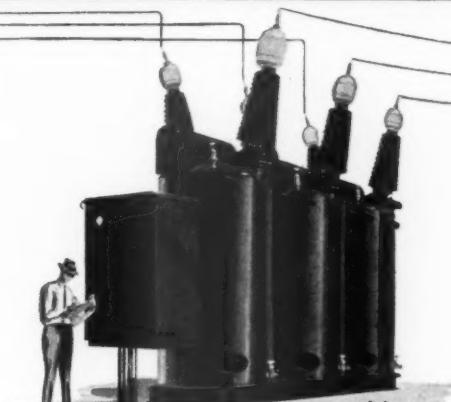
Machinery and Equipment help

ALLIS-CHALMERS

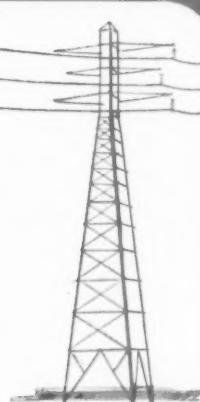
Are the machines Electric Living!



2. POWER TRANSFORMER



3. CIRCUIT BREAKER



WHEN YOUR electric utility connects you to their line, good living becomes available from every electrical outlet in your home . . .

...electric good living that brings you light—cooks your dinner—sweeps your rugs—keeps you warm or cool—brings you entertainment . . . reliably and at low cost.

All through the system, from the powerhouse to your home, Allis-Chalmers equipment serves you. The pictures on these pages show:

1. An Allis-Chalmers steam turbine-generator which generates electricity . . .

2. Allis-Chalmers power transformers which step up the voltage for economical, long-distance transmission . . .

3. Allis-Chalmers circuit breakers which protect the system—control the electric power . . .

4. An Allis-Chalmers substation which reduces the voltage for local service . . .

5. The familiar Allis-Chalmers pole transformer which delivers electricity to your home at household voltage.

★ ★ ★

All of this equipment—from turbine-generator to pole transformer—is built by Allis-Chalmers to help electric utilities bring low-cost electric living to your door.



... help People Produce More—Have More—LIVE BETTER!

SCHALMERS



This Takes Skill!

THIS plantation worker tosses coffee beans high into the air and with artistry of motion separates them from the chaff. It looks easy—but it takes skill.

It also takes skill to protect properly and adequately the heavy investment in property, machinery and equipment of the coffee business or any other business of Americans in foreign lands.

AFIA has that skill.

For AFIA, through its 500 world-wide offices and agencies, keeps constantly informed of local conditions and laws and thus provides insurance protection that meets every requirement abroad.

*Ask your insurance agent or broker to take
your foreign insurance problems to AFIA*

Write for the new AFIA booklet



AFIA

AMERICAN FOREIGN INSURANCE ASSOCIATION

161 William Street • New York 38, New York

CHICAGO OFFICE . Insurance Exchange Building, 175 West Jackson Blvd., Chicago 4, Illinois
DALLAS OFFICE Mercantile Bank Building, 106 So. Ervay Street, Dallas 1, Texas
LOS ANGELES OFFICE Pacific Mutual Building, 523 W. 6th Street, Los Angeles 14, California
SAN FRANCISCO OFFICE 98 Post Street, San Francisco 4, California
WASHINGTON OFFICE . . Woodward Building, 733 15th Street, N.W., Washington 5, D.C.



IN
BUS
OCT

AL

PAGE

INTERNATIONAL OUTLOOK

BUSINESS WEEK

OCT. 9, 1954



The West rocked Moscow back on its heels with the London agreement on German rearmament (page 31). Foreign Minister Molotov had expected to split the Western allies over the German problem.

The London agreement, which was largely the work of Foreign Secy. Anthony Eden and Secy. of State John Foster Dulles, will make a rearmed West Germany a full partner in the North Atlantic Treaty Organization.

London won't provide the main ingredient of the now defunct European Defense Community—the pooling of manpower and resources. But it does put Britain right in the middle of continental defense and makes the Atlantic alliance stronger.

Moscow suffered other setbacks in Europe this week:

- The agreement dividing Trieste between Italy and Yugoslavia. The prolonged dispute over Trieste has prevented close cooperation between the two countries, thus weakened the Mediterranean sector of NATO. It has also tied the hands of the Italian government in dealing with the Communists at home.

- Bevan's defeat in Britain. This left-wing Laborite has been peddling an anti-American line, hoping to grab the leadership of the Labor Party. He was soundly beaten at Scarborough, where the Labor Party held its annual conference. This removes the hopes Moscow and Peking have had for a Bevan-led Labor victory in next year's British elections.

- Exposure of Communist espionage in Paris. Communist agents have been leaking military information out of the Defense Council, France's counterpart of our National Security Council. Now that this business is in the open, Gen. Charles De Gaulle's right-wing supporters won't dare co-operate as closely as they have in the past with the Communists in the French National Assembly.

Moscow isn't taking all this lying down, of course.

Vishinsky offered a new Soviet disarmament proposal at the United Nations last week as the opening shot in Moscow's campaign to torpedo London.

As Washington sees it, the Kremlin will hold out disarmament as an alternative to rearming the Germans. And France will be the main target in this game.

Vishinsky's proposal was cleverly designed to appeal to the French. He based it on a joint French-British disarmament plan that was worked out last spring. What's more, he agreed for the first time to discuss two questions the West has always put foremost: (1) a reduction in conventional as well as atomic arms and (2) international inspection machinery.

It's doubtful, though, if this Soviet gambit will block French ratification of the London agreements.

The U. S. will tie itself more closely to the Colombo Plan—the Commonwealth economic and technical assistance program for South Asia (BW—Oct. 2 '54, p147).

At a Colombo Plan meeting in Ottawa this week, Japan and Thailand joined as full members. The Philippines may also come in, which would make three members who look to the U. S. for economic support and military security.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK
OCT. 9, 1954

This provides a base for coordinating the economic development of all the free nations in Asia. And Washington is seriously exploring the possibility of using it for funneling U. S. aid to the area.

But don't expect any firm decisions on this right now. It will take months to work out details and to solve some real political problems. For example, neutrals like India and Indonesia may not like to have the U. S. tied so closely to the Colombo Plan.

—•—

Canada's financial community is agog with merger talk. In the wind is a union of the Bank of Toronto and the Dominion Bank, ranking sixth and seventh among Canada's 11 chartered banks.

It would be the first bank merger for Canada since 1931; the first in history between two partners of almost equal size.

This week, the parties are sounding out Ottawa, which, along with the shareholders, has final say. It's by no means certain that the union will have federal blessing. But the principals are optimistic.

If the merger comes off (and the next few weeks should tell the tale) you'll see a "Big Five" of Canadian banking.

The Toronto-Dominion combination would become fourth-ranking (assets of almost \$1.1-billion), displacing the Bank of Nova Scotia. Royal Bank of Canada, Bank of Montreal, Canadian Bank of Commerce would remain the leaders.

Merger appeals to both parties. They feel they need size to compete with the big fellows.

—•—

Courtaulds, Ltd., Britain's biggest rayon producer, talks of trebling its viscose rayon staple capacity in Alabama.

Prewar, Courtaulds controlled American Viscose Corp.—its holding was the largest and last investment Britain sold here early in World War II. Now its new U. S. subsidiary, Courtaulds Alabama, is making up for lost time.

The Courtaulds plant was complete last year to produce 50-million lb. of viscose rayon staple yearly. By next spring, a new plan calls for 100-million lb. of capacity—nearly one fourth total capacity in the U. S. For the future, Courtaulds is thinking of 150-million lb. annually.

Courtaulds says it can't satisfy demand, will probably finance the expansion out of its own pocket.

Note another British business milestone in the U. S.: This Saturday, Bowater Paper Corp., London, dedicates its spanking new \$60-million newsprint plant in Calhoun, Tennessee (BW—Jul. 31 '54, p98).

—•—

At midweek Brazil got a new \$160-million loan from the Federal Reserve Bank of New York. That's double the credit negotiated last June.

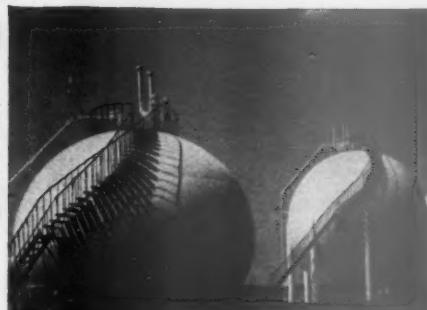
With this loan in his pocket Finance Minister Eugenio Gudin thinks Brazil can handle its dollar debts for the time being. To keep the country out of further trouble he plans drastic curbs on credit and on imports plus a much lower pace over-all in economic development.

Contents copyrighted under the general copyright on the Oct. 9, 1954, issue—Business Week, 330 W. 42nd St., New York, N. Y.

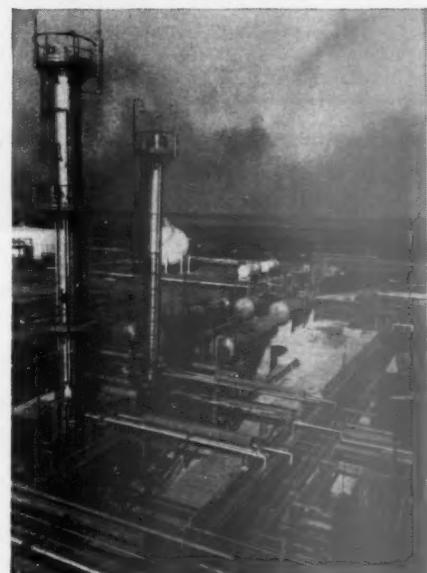


C-54, MILITARY AIR TRANSPORT SERVICE, REFUELLED AT MITCHEL AIR FORCE BASE.

Tamed in Tanks for the "Wild Blue Yonder"



HUGE HORTONSPHERES provide storage for National's ethyl chloride.



THE ETHYL CHLORIDE UNIT of National's vast, new petrochemicals plant at Tuscola, Ill.



NATIONAL DISTILLERS PRODUCTS CORPORATION NEW YORK 16, N. Y.

OLD GRAND-DAD · OLD TAYLOR · OLD CROW · PM · OLD SUNNY BROOK · GILBEY'S GIN
HILL and HILL · BELLOW'S PARTNERS CHOICE · BOURBON DE LUXE · BOND & LILLARD · OLD HERMITAGE

Old Grand-Dad, Old Taylor, Old Crow, Kentucky Straight Bourbon Whiskies, Bottled in Bond, 100 Proof. PM Blended Whiskey, 65% Grain Neutral Spirits, 86 Proof. Gilbey's Distilled London Dry Gin, 100% Grain Neutral Spirits, 90 Proof. Bellows Partners Choice Whiskey—A Blend, 60% Grain Neutral Spirits, 86.8 Proof. Old Sunny Brook, Hill and Hill, Bourbon De Luxe, Bond & Lillard, Old Hermitage, Kentucky Whiskies.

BUSINESS ABROAD



SHOOTING IN ITALY

Foreign settings for U. S. films: Director Mankiewicz goes over with Ava Gardner routine for *The Barefoot Contessa*, a film about a U. S. movie company abroad.



SELLING HOLLYWOOD

Foreign market spells profit to Hollywood in Munich, *Adventures of Don Juan* packs 'em in.

Hollywood

Much of *The Barefoot Contessa*, the Ava Gardner vehicle that premiered last week in New York, was filmed abroad (top picture), much of its subject matter concerns Hollywood abroad—the seamier side of making movies and unmaking happiness in Europe. It has already been vigorously promoted overseas, and is getting the full treatment here. In this one package, you can see the increasing orientation of the U. S. motion picture industry toward its foreign markets.

This week the movie moguls—whether they are in Beverly Hills, Rome, or on the west coast of Ireland—are thinking in terms of the most super-colossal export year in history. They can almost hear the rattle of lire, shillings, cruzeiros, and yen as more than 200-million souls, the average weekly audience of U. S. films abroad, go to the movies.

This gigantic audience will probably supply in 1954 \$185-million in earnings that can get through exchange barriers to Hollywood's coffers—\$15-million above last year's all-time high. And it's not just export gravy: No major industry in the nation depends so heavily on its foreign markets. In nine out of 10 productions, foreign box office spells the difference between profit and loss.

• **Tough Start**—This record figure will mean a new victory in the tough, uphill fight Hollywood has had in the foreign market since 1947.

The postwar dollar shortage in Europe and Latin America hit U. S. movies, admittedly a luxury import, hard. Many countries set up import quotas. Where earnings accumulated, Eric Johnston's Motion Picture Export Assn. had a rough time getting them remitted to the U. S. in dollars. MPEA sometimes had to resort to round-about deals involving everything from printing Bibles in Finland to salvaging World War II shipping off the French coast.

• **Help in Need**—But particularly in the dark days of 1949, 1950, and 1951, the foreign market more than pulled its weight for a Hollywood badly dented by television, night baseball, roller derbies, and dog racing. Despite all the restrictions, foreign receipts continued to climb throughout the postwar period. Last year they amounted to 42% of the industry's gross, a big jump from the 33% of prewar days.

It's not Pollyanna to say that some of these restrictions may have helped Hollywood in the long run. The use of blocked earnings to make films

The Focus Is Overseas

locally in Britain and other West European countries has resulted in better movies. And it has been largely as a result of these better pictures that Hollywood has recaptured some of its U.S. market from TV, and is looking forward this fall to the best season since TV came on the scene.

• **Battle of Britain**—The uphill battle to earn money and then get it to the U.S. can best be followed in Britain, Hollywood's biggest foreign market. In 1939, American movies grossed \$70-million in Britain, with net earnings between \$35-million and \$40-million. (Statistics, as Eric Johnston has pointed out, are not one of the strong points of the industry, and almost all figures are estimates.) But in the postwar depths of 1947, the British desperately sought to clamp some kind of regulation on the export of dollars earned by U.S. films.

They first proposed a direct ad valorem tax. But finally negotiations boiled down to an agreement to remit a limited amount of earnings to the U.S. in dollars and to use blocked funds in Britain wherever possible. The remittable sum has steadily but slowly increased with Britain's bettering economic situation.

Last year, a total of \$21-million was moved out of Britain to Hollywood. Last week, the British renewed the pact with the industry. Though restrictions continue, \$24-million is added to the amount that can be remitted in 1954.

Hollywood will continue to make movies in Britain with part of its blocked earnings. While foreign-made films were only 8% of all Hollywood production last year, the industry's use of funds in Britain was substantial.

• **Protective Barriers**—U.S. movies would make an even better showing in Britain if it were not for measures to protect Britain's domestic industry. Gross receipts in Britain are up generally, as J. Arthur Rank reported in a recent message to stockholders. His company controls two of three big circuits of theatres outside London. But American producers complain that this monopoly control cuts into their receipts.

No film plays more than a week whatever its box office draw. In addition, 30% of the viewing time in all theaters is reserved by law for British pictures, be they bad, good, or indifferent.

• **Exception**—This pattern of restrictions has been general, with only Canada, the U.S. industry's second market, an exception. Last year Canada (treated as a domestic market by most of the

companies), remitted more than \$20-million.

• **German Revival**—Germany, the industry's third largest market in 1953, has made a remarkable comeback in motion picture attendance. Last year Hollywood was able to bring home over \$10-million. In prewar years under Hitler, Hollywood had to work against UFA, the government monopoly in production, distribution, and exhibition. Bonn now plans to split UFA into three companies. But since it was by far the largest prewar film organization in Europe, its resurrection in any form will be a threat within Germany. You have only to remember the high quality of German technicians, actors, and directors to see what worries Hollywood. Garbo, Marlene Dietrich, and Ingrid Bergman all got their start with UFA, as did directors Billy Wilder and Ernst Lubitsch.

• **Italians in U.S.**—But whether the Germans—any more than the British, French, and Italians—will be able to crack the market outside their borders is open to question. The Italians have made the most spectacular postwar try. Their realistic movies, made with low budgets, often without sound sets, have won critical acclaim in the U.S., Britain, and France. But recently Italian attempts to match lavish Hollywood epics have ended in disaster.

Four years ago the Italian government talked Hollywood into signing an agreement to help the Italian industry get a start abroad. A kitty was set up, with Hollywood kicking in 12½% of its Italian gross earnings—a substantial sum since Italy is the U.S. industry's fourth largest market. This fund was to be used to promote Italian films outside of Italy, particularly in the United States.

U.S. independent producers and film importers squawked when the fund was used to help finance Italian Film Export, a trade association. Operating in the U.S., IFE soon became a distribution as well as promotion outfit. U.S. distributors and importers claimed they could not get their hands on good Italian films except through IFE. They argued that this kind of indirect subsidy by the U.S. companies violated the spirit of the Webb-Pomerene Act, which allowed the movie companies and other industries to act in concert abroad without violating U.S. antimonopoly laws.

The pact is now a thing of the past, and the Italians are here to work out details of a new one. This may involve some lengthy negotiations since the old



WITH ANTI-CORROSION STAINLESS STEEL FASTENINGS



SAVE INITIAL COST!

Superior production capacity and know-how means lower costs from Anti-Corrosive, America's oldest and largest firm dealing exclusively in stainless steel fastenings!



SAVE TIME!

IN STOCK inventory of more than 9,000 varieties and sizes of stainless fastenings means immediate delivery of your needs! Streamlined service on special orders, too!



SAVE OPERATING COSTS!

Anti-Corrosive's consistent top quality protects your production schedules, eliminates rejection headaches, means trouble-free operation!



Write for FREE Catalog 54A, the one complete reference handbook to stainless steel fastenings! Varieties, sizes, prices and discounts at a glance!



**ANTI-CORROSION
METAL PRODUCTS CO., INC.**

Castleton-on-Hudson New York



Orlyt ALUMINUM GREENHOUSE

For Healthful Recreation

It's fun, flowers, and fresh vegetables all year 'round—a lifetime of carefree gardening. Orlyt greenhouse is maintenance-free. Nothing to give out or wear out. Easy-to-put-up with prefabricated parts.

**\$20.00 per month buys
the 10 by 11 ft. Orlyt
shown—\$594. All ready to
set on your foundation.**

Others from \$339—only \$12.00 per month. No down payment. Automatic heat and ventilation extra but proportionately low-priced. Send for Catalog No. 3-0-1.

LORD & BURNHAM
BINGHAM, N.Y. • DEPT. PLANNERS, INC.

**"Always Makes a
Good Impression"**



**Heyer CONQUEROR
SPIRIT DUPLICATORS**

with ALL the features . . .

- Print 120 or more copies per minute.
- Print 1 to 5 colors, in one operation.
- For sharp, clean, copies Conqueror features include—Raise-and-Lower Control . . . Adjustable Fluid Control . . . Built-in Reset Counter . . . Pressure Control . . . Positive Rotary Feed.

The Heyer Conqueror Model 76, Spirit of '76 gives you for the first time "push-button" automatic electric duplicating . . . gives you complete freedom from manual effort.

Write today for descriptive booklet

THE HEYER CORPORATION
1823 S. Kostner Ave. Chicago 23, Illinois
Quality Duplicators and Supplies Since 1903

agreement allowed U.S. companies to remit every year 37½% of their earnings in Italy at the official lira-dollar rate of exchange, instead of the free market rate. This was in exchange for Hollywood's contribution to IFE.

• **Subsidies**—The inability of the Europeans to crack the U.S. market is both the beginning and the end of Hollywood's story abroad. No European industry can exist without government subsidy unless it makes headway in the world market. That applies to Hollywood, too. But the U.S. industry is the only film production industry in the world that does not live by a government subsidy in some shape or form. This is largely because Hollywood dominates the world's screens, getting about 70% of the total playing time.

• **Appeal**—Of course, there is no prohibition in the U.S. market against import of foreign films. There has been some interest in them since the war, particularly in "art" theaters in metropolitan areas. But foreign films have been, with only a few exceptions, no great financial success.

The lack of universal appeal in foreign films can't be completely explained. Hollywood can appeal to Bronx housewife, Parisian shopgirl, and Singapore pedicab pusher in the same film. Perhaps part of the explanation is that Hollywood films have the same attraction as many other American products abroad: they are often more technically sound, frequently more lavish.

Even the Russians still play some Hollywood films—many of them "war booty" taken when Soviet armies invaded Germany. Czechoslovakia gets a trickle, but elsewhere behind the Iron Curtain, only prewar films are still circulating, however bad their condition. China, once a good market, is now closed, too.

• **East and South**—Only India, with the world's second largest domestic film production, has proved immune to Hollywood's siren song. American films grossed less than \$1-million in India last year.

Elsewhere in the East, particularly in Japan, Hollywood's business has boomed since World War II. Japan and Latin America, with rapidly expanding markets for films, have largely accounted for the over-all increase in gross receipts. But remittance problems have plagued the film companies there, too. Frozen Japanese yen were once blocked for two years. Japan is now severely limiting the import of U.S. films.

In Latin America, Hollywood struck a bonanza, last year when the Brazilians allowed \$19-million that had been piling up for several years to be remitted to the U.S.

New Credit

**Proposed Export-Import
Bank program for easier
terms would help U.S. ex-
porters meet competition.**

The Export-Import Bank is preparing a new program to help Americans who do business abroad meet sharpening competition in the world marketplace.

The Bank will try to set up direct lines of credit to exporters in advance, allowing them to offer good terms to their customers at the moment of sale. The credit will be as nearly automatic as possible, depending on the credit standing of the exporter and the buyer abroad. For the businessman, the scheme could mean fewer orders lost to Europeans because of easier credit.

For the private U.S. banker, there are equally significant aspects. The bank means to handle all future exporter loans through the commercial banking system, which will hold exporters' notes under a 100% Ex-Im Bank guarantee. That way, Bank experts believe, the U.S. banking fraternity will gain experience in large-scale export financing, and eventually take over the risk itself.

• **Growing Support**—The program is something most exporters, and many bankers, have been pressing on Washington for over a year (BW-Mar. 13 '54, p157). For Washington's part, the scheme has budget-balancing appeal—taking a substantial portion of the Bank's future lending off the Treasury's books, easing the pressure on the debt ceiling.

The Export-Import Bank project hasn't yet got a complete go-ahead: For one thing, the Bank's reorganization hasn't been completed. There are strong criticisms, from within the Administration and from competitor nations abroad. The debate on financing U.S. foreign trade will continue. But as of this week, support for the Ex-Im program—in Congress and among some powerful business groups—seems strong enough to carry the day.

Ex-Im's new planning reflects the pressures generated by the changes in world business since the end of the Korean War.

From V-J Day until a year or so ago, marketing abroad was a cinch for Americans. Demand for our goods to repair war damage was almost unlimited; only supply, and the ability of foreigners to pay, seemed to restrain our sales. The U.S. production plant took care of the first; over \$40-billion worth of aid eased the second. And a generation of U.S. exporters that had never faced the tough infighting of competitive world

Credit Plan Pushes U.S. Exports

markets grew up.

Things are different today. Europe, and to a lesser extent Japan, are producing more efficiently than ever. The big drive in the world is for markets, not goods. U.S. exporters are taking an unaccustomed beating from European competitors in many a foreign market.

• **New Factors**—Recovery of production, lower prices, dollar shortages, and the thoroughness with which some nations bird-dog new markets are factors in the competition. But there's another important one—export insurance and easy credit supplied to many foreign exporters by their banks and governments. The merchant banks of Europe have a tradition of export financing. And nearly a score of governments offer exporters insurance against trade risks—confiscation, inconvertible currencies, bad debts—which in turn enable them to secure credit.

In the U.S., commercial credit is rarely available to exporters for more than 180 days at the outside. That's partly due to bankers' unfamiliarity with foreign trade financing, partly due to conservative custom, local and federal regulations.

Prewar, the Export-Import Bank's direct loans to exporters were on a spot basis, small-scale. Postwar, the bulk of Ex-Im's multimillion-dollar loans has gone to foreign governments for reconstruction or integrated development projects. It helped sell U.S. goods, but didn't help many exporters directly.

From now on, Ex-Im expects the bulk of its business to be in direct credits to exporters. The new plan divvies up the export community into three categories:

Old Hands, Old Customers. An exporter who has done a substantial business abroad with the same buyers and agents will be eligible for an automatic line of credit. He'll have to supply detailed information on the volume and character of his trade, and on his own financial status. He must show to what extent the equipment he sells contributes to the dollar earning capacity of importing countries. And, he'll have to document the credit-worthiness of his customers. Once that's done, the Bank may set up an over-all line of credit, to be drawn on over 12 months.

Old Hands, New Customers. Exporters with plenty of foreign business, but without regular customers, will be eligible for semiautomatic credit. By supplying the Bank in advance with all the information on their own status, the exporter can get an idea of how much credit he can expect over a given period. But such an exporter will have to clear each transaction with the Bank when

it comes up, in order to determine the reliability of the buyer, and the dollar availability of the importing country. Processing time at the Bank, however, will be much faster than in the past.

Newcomers. Businessmen with little or no foreign business history will have to have each loan application screened, until they have a foreign trade record upon which to base a line of credit.

Loans under the system will probably extend from three to five years, carrying a minimum interest of 5%.

• **Sharing the Risk**—A key feature of the plan is that the exporter must carry part of the risk himself—something few but the largest U.S. exporters are willing to do. The Bank will require the buyer to put at least 20% down, and that the exporter finance 20% himself, leaving 60% for the Bank. The idea, of course, is to discourage fly-by-night trade deals.

Once the credit is approved, Ex-Im will arrange with private bankers to handle the operating details. The loan will be issued by the private bank, guaranteed by Ex-Im. The private bank will probably receive 3% of the total interest on up to 5%-interest loans, half of anything over. Ex-Im pockets the rest.

The question of interest is a touchy one. The more interest the commercial banker gets, the less profit the taxpayer receives from Ex-Im operations—yet the taxpayer takes all the risk. On the other hand, the private banks will perform services that they can do efficiently—and Ex-Im couldn't do without a big expansion, costing the taxpayer money. Above all, the transactions won't show up on the public debt.

Ex-Im financing plans worry some Americans—and some foreigners. You hear these charges:

• By giving government help to exporters, the Bank, in effect, is widening the dollar gap that the taxpayer spent so much money closing.

• Extending easy, medium-term credit to underdeveloped countries will tend to reduce their credit eligibility for the long-term loans needed for integrated development projects, increase their dollar obligations beyond their means to pay.

• For the U.S. to step in with a direct large-scale export financing program could touch off an international credit war, just as damaging to world economic cooperation as a tariff war.

• **On the Scales**—Ex-Im's answers to these criticisms are apt to reassure the critics, and disappoint the exporters. The Bank is not interested in expanding the relative U.S. share of world export markets—rather it means to help Americans keep their foot in the door with



WHO ROBBED THE FILE? :#!!

Too late, now! The damage is done, and some urgently needed document is gone—probably forever!

A Peerless DRI-STAT photocopier is your best protection against file-robbing "thieves." With this truly modern office machine, it's easy to make those necessary extra copies of reports, charts, letters, or work sheets you may need but can't risk losing from your files. In just one minute per page, DRI-STAT will faithfully reproduce everything on the original—pencilled notations, half-tones, material printed in colored inks—in clear, sharp, black-and-white copies.

Ask your Peerless Distributor to show you how DRI-STAT can end your file-robbing problem and reduce your clerical work load. Call him for a demonstration, or mail the coupon.

PEERLESS
DRI-STAT



PEERLESS PHOTO PRODUCTS, INC.
Shoreham, L. I., New York BW-10

I'd like to see a demonstration of DRI-STAT on my work.
 Please send me your free brochure describing DRI-STAT.

NAME.....

TITLE.....

ADDRESS.....



Are Gifts Good Business?

These questions come up every time: "Who pays for a Group Insurance Program? Should it be a gift from employer to employee, or a share-the-cost business proposition?"

The buying power of tax-free, overhead dollars tempts us to recommend the gift-gratitude relationship of the *non-contributory* program—where the employer pays all.

Our experience proves that positive, lasting employee interest is essential to a Group Program. This is assured only when the *contributory*, or cost-sharing approach is used.

More questions? A Zurich Group Specialist—your own insurance broker knows one—has the answers.

Zurich-American

"Great for Group"

Zurich General Accident and Liability Insurance Company, Ltd.
American Guarantee and Liability Insurance Company
135 S. LA SALLE ST., CHICAGO 3, ILLINOIS



NEW IMPORTANT LOOKING "UP-TO-DATE" MEMO-PAD

A handsome addition to any desk from city office to gas station—through chain stores and home. Your company name or advertising message is stamped in the polished brass clip. The enameled steel base is cut to hold 4½" x 6" handy paper slips or pads. Individually boxed.

STYLE No. 7017	50	100	250	500	1000
Stamped Message*	3.05	2.10	1.55	1.35	1.25
*Includes 20 letters of copy, For each additional letter add 1.35					

METAL ARTS CO., INC.

742 Portland Ave. • Dept. 16 • Rochester 8, N.Y.

clues

to a \$3,000.00 sale

With only a \$20 investment in a small space advertisement in the "clues" section of BUSINESS WEEK, a firm secured a \$3,000.00 sale. And better yet, they received substantial inquiries for future orders up to \$10,000.00 each.

something approaching the credit facilities available to competitors. That explains the Bank's plan to base credits on an exporter's past volume. Moreover, the Bank's officials argue that credit plays a small role in the relative competitive position of U.S. and foreign exporters: Price, currency availability, good old-fashioned selling are much more important.

Fundamentally, the export credit debate boils down to this: The U.S. can't export more without importing more—unless we give it away. Credit merely postpones the day of payment, and doesn't affect export volume over a long period unless the creditor makes loans with no hope of repayment. That's a giveaway again. And Export-Import Bank says it will have none of it.

Kaiser Strikes an Auto Deal

New plant in Argentina will use idle machinery from Willow Run . . . Floyd Odlum sees Peron about oil . . . Finding capital for India businessmen.

This week brought the first fruits of Henry J. Kaiser's whirlwind, summer tour of Latin America. In Buenos Aires, he signed an agreement with Pres. Juan Peron's government outlining a joint venture into auto, truck, and Jeep production.

It's a feather in Peron's cap. Over a year ago he launched a drive to recruit foreign capital and technical aid for Argentina's stagnating economy. Until the appearance of Kaiser—and Atlas Corp.'s Floyd Odlum (see story below)—no major U.S. investor has taken the bait.

Argentine government's Aeronautical & Mechanical Industries Corp. (IAME), which has been experimenting with auto and plane production at Cordoba, to put up 51% of the capital of a new auto company. The rest of the stock is to be sold to private Argentine investors. Kaiser talks—optimistically—of an annual production target of 40,000 vehicles after three years. For his pains, Kaiser will be able to send home 8% of his share of the profits of the auto plant—and after ten years he can begin remitting the principal.

And Odlum, Too

Last week, Floyd Odlum, president of Atlas Corp., paid his third visit in four months to Juan Peron, President of Argentina. Perhaps within the month, the future of the Atlas-Argentine oil and uranium development plan will be settled.

Here's the latest edition:

Petroargentina, Atlas-organized, will build for the government a 400-mi. pipeline from the Neuquen oil fields to the port of Bahia Blanca. The government will pay in 15 annual installments, cost-plus. Buenos Aires and Petroargentina will share in developing up to 500 new wells in the area. Dresser Industries, Dallas, which helped pioneer the deal, is expected to supply much of the dollar equipment and technical aid.

Odlum has agreed to undertake a three-year survey of Argentine uranium resources. The terms look forward to Odlum participation in setting up some kind of nuclear energy plant.

• Roundabout—Odlum means to finance a large part of the investment by using blocked peso balances of U.S. investors in Argentina. He figures there are some 700-million pesos (\$50-million) there. Atlas Argentina, another Odlum creation, would mobilize some of these funds, paying for them in no par value dollar shares.



For Kaiser Motors Corp. (Willys Motors, a subsidiary, is the actual participant) the arrangement is a neat opportunity to unload idle machinery. The bulk of Kaiser's \$10-million investment is to be in the form of auto equipment gathering dust at Willow Run, once busy making Henry J cars, discontinued over a year ago.

The deal calls for Kaiser and the Ar-

dit de-
S. can't
more-
merely
t, and
a long
s loans
that's a
import

from
ding

cal &
AME).
with
rdoba,
a new
stock is
the in-
lly—of
0,000
pains,
e 8%
e auto
begin

resident
sit in
ent of
month,
the oil
will be

, will
00-mi.
ldls to
overnment
nstall-
and
oping
resser
oneer
much
chnical

ake a
nium
ard to
some
to fi-
ment
U. S.
there
0-mil-
other
some
n no

There's often a slip twixt plans and their fulfillment in Argentina. You can't predict whether the deal will go through. On Odlum's side is Peron's apparent anxiety to get oil development moving; against him are some influential Argentines who want no part of Yankee oilmen. As of this week, the government has promised a decision in 30 days.

Investors for India?

An imposing cadre of British, American, and Indian businessmen is meeting this week in Washington with officials of the World Bank and the Foreign Operations Administration. They're looking over blueprints for a new kind of investment company, designed to funnel capital and technical help into India's small industry.

It's a new approach to the problem of industrializing backward nations. Timing is opportune: The Soviets are dangling luscious offers of money, equipment, and knowhow in front of underdeveloped peoples, and especially India (BW—Oct. 2'54, p150).

Called the Indian Development Finance Corp., the new company would attempt to blend the best techniques of public and private investment. Some \$10-million of its \$35-million initial capital would come from Indian, U. S., and British private investors; the rest from FOA's counterpart funds in India and a World Bank loan. Though most of the money is public, the corporation is to be run as a private institution—with a liberal sprinkling of Americans and Britons in top management.

FOA had the idea for the corporation last year. World Bank followed up by sending two American investment bankers (George Woods, chairman of the First Boston Corp. and Robert Kraft, American Securities Corp.) to India in February to test the ground. Indians approved, took the project on and came up with the proposals that are being hashed over this week. Among the Indian business leaders involved are A. D. Schriff, of the huge Tata combine, and the Birla brothers, heading one of India's largest industrial empires.

• **Bottleneck**—The corporation has been tailored to India's economic development, now at its halfway mark. In terms of absolute volume, there's a sizable industrial production—but it is negligible in the face of potential demand.

The bottleneck is shortage of capital for light industry. The big fellows can, and do, turn to government—their own and foreign—or to foreign industrial groups. But thousands of smaller businessmen have nowhere to turn in the absence of an active, local money market. The corporation will try to build

up India's embryo capital market, as well as acquaint investors of the U. S. and other industrial nations with opportunities in India.

• **Prize**—The lure is the potentially insatiable Indian market. One American put it this way: "Almost everything made in India could be made better and cheaper by introducing a pinch of modern production and marketing methods, and expanding the volume of production."

BUSINESS ABROAD BRIEFS

Pakistan's jute crop, the country's biggest dollar earner, will be off by 1-million bales this year due to disastrous floods in East Bengal. This is another reason that Premier Mohammed Ali will push for more U. S. aid during his current visit with Pres. Eisenhower.

Going-Dutch trend of U. S. businesses in Europe continues: Latest firm to establish plant in Holland is Merck & Co., chemicals and pharmaceuticals house (BW—Dec. 19'53, p130). Meanwhile, Netherlands Bank has O.K.'d trading of U. S. securities on the Amsterdam exchange for guilders.

Natural rubber interests in Malaya and Ceylon are girding for a battle with synthetics. Massive replanting and research are the weapons they hope to use against falling artificial rubber prices and better synthetics now being developed in the U. S.

Jets for India are in the works, if present negotiations between Rolls Royce and the Indian government come off. Plans call for a jet-engine plant at Bangalore, south-central India, near the Hindustan Aircraft Factory.

Johns-Manville Corp. has opened the world's largest asbestos extraction mill, 100 mi. northeast of Montreal. The plant will have a capacity of 16 carloads a day—a third of the free world's output—when completed in 1956.

Insurance pool: Five Latin American insurance firms have set up a \$375,000 fund in New York to insure payment of premiums and claims by American and Canadian policyholders. The fund is on deposit with the Marine Midland Trust Co.

Burma's trade mission, now touring the U. S., is bargaining for more than \$20-million worth of rolling stock, river craft, harbor installation, and communications equipment. The hitch is that if Burma can get a better deal in sterling, it will buy from British manufacturers.

"Better Seating
stepped up
work output
in our office"



says:
Mrs. Lucille Wilson
District Office Manager
American Airlines, Inc.



*\$31.00 in Texas and
22 Western States (Zone 2)

Fatigue, work-lag and absenteeism drop when correct seating is introduced. That's why so many business men choose the Cosco Secretarial. It's designed by seating engineers to reduce fatigue, increase efficiency. Four easy adjustments mold this Cosco chair to the individual's build... while he or she sits comfortably on a saddle-shaped, foam-rubber seat. Sturdy, all-steel construction. Die-drawn base. Choice of upholsteries and baked-on enamel colors. Mail coupon for details today.

HAMILTON MANUFACTURING CORPORATION
COLUMBUS, INDIANA

Available in Canada and other world
markets through registered Cosco dealers

COSCO Office Chairs

— Please attach Coupon to your letterhead —

COSCO Office Chairs, DEPT. BW-10A
Hamilton Manufacturing Corporation
Columbus, Indiana

I would like the name of my nearest dealer and
full details on the following **COSCO** office
chairs.

Secretarial Executive Side

Firm.....

By.....

Address.....

City..... Zone..... State.....

**DO YOU Roll
FLEXIBLE
MATERIALS?**

Dyken Automatic Rolling Machines give you important time and labor savings on SCREENING • LAMINATED PAPER TEXTILES • ROOFING • RUGS • WALLPAPER • CARPETING • PLASTIC • RUBBER • LEATHER FELT • LINOLEUM • CANVAS CORK • PADDING • OILCLOTH BURLAP • INSULATION and other pliable materials!

NOW YOU CAN roll up more lengths per hour...with less labor! Rolling and paper-wrapping handled in one speedy operation. DYKEN Automatic Rolling Machines (fully patented) available for all material widths and lengths. Push-button operation permits using unskilled help. Tight, neat rolls require no center core or pole. Save time, labor, shipping and storage space.

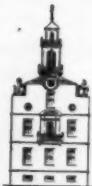
WRITE FOR LITERATURE AND RECOMMENDATIONS — Send details of your problem for expert analysis and advice. No obligation.

DYKEN

MFG. CO., Inc.
732 Indiana Ave.
West Bend, Wis.

MIT
Massachusetts Investors Trust
DECLARES ITS
120th Consecutive Dividend

The Trustees have declared a quarterly dividend of 23 cents a share, payable October 25, 1954 to shareholders of record at the close of business September 30, 1954. This dividend is entirely paid out of net income received by the Trust on its investments.



ROBERT W. LADD, Secretary
200 Berkeley Street, Boston.

EXECUTIVE PROBLEMS?

If your organization is in need of men at the executive level try contacting them through an inexpensive but effective advertisement in BUSINESS WEEK'S own classified advertising section....."clues".

THE MARKETS

MARKET BOOM: Capital Goods Pace the Rise

Dec. 31, 1952 = 100

140

130

120

110

100

90

80

Capital Goods Shares

Consumer Goods Shares

1953 1954

Data: Standard & Poor's Corp.

(C) BUSINESS WEEK

The Heavies Are Buoyant

For a year now the capital goods shares have been performing better than consumer goods on the Big Board (chart).

In the stretch since September, 1953, Standard & Poor's index of heavy industry has gone up nearly 47%, compared with a 31% for the consumer goods shares. In both cases, the climbs have brought the indexes close to their record highs.

• **Why?**—Wall Street cites several reasons for the superior showing of the heavy goods issues:

The end of EPT has been a boon to many heavy industries, such as steel, chemicals, and electrical equipment, which have been in high tax brackets. With no excess-profits tax since the start of the year, many of these companies have been able to bring a larger percentage of sales down into net, despite rising operating costs (BW—Aug. 21 '54, p82).

Rising cash dividends in the future are fairly widely expected. In other cases, investors are looking for stock dividends or splits—that tend to boost prices by making stocks easier to market, and that have often heralded higher dividends (BW—Jul. 31 '54, p84).

Stability in good times and bad is increasingly attributed to heavy industry by its admirers despite that group's past feast-or-famine record, they now argue that if depression comes, the suppliers of basic materials such as steel, lead, zinc, and cement (page 68) will materially profit from urgently stepped-up government spending for public works and defense. By the same token they figure the consumer goods makers tend to overproduce in good times, and sag badly when stiffer competition returns.

The heavy industry bulls point with particular pride to this week's rise in steel operations to 70.4% of capacity. That's the highest rate since June, and is happily invoked as an indication that the industry may have turned the corner after jouncing along unsteadily since mid-1953. Mill orders for steel have been picking up, and there's a feeling that inventories may have been trimmed to a point where reordering will gain momentum.

• **Over-All**—As for stocks in general, the old pros are regarding the situation with faintly lifted eyebrows. Standard & Poor's comment for this week is, "The dizzy pace of the market's recent advance calls for increased care in the se-

lection of issues. From a near-term standpoint, allowance should be made for the possibility of a market pause or reaction."

Steels Pick Up in the "Favorite 50"

The professional money managers of the investment trusts are still shifting their holdings of common stocks with the sleight-of-hand of a T-formation quarterback.

The latest listing of the Favorite 50, compiled semi-annually by Wall Street's Vickers Bros., shows widespread switches, in both industrial groups and individual companies making up the 50 top stocks the trusts were holding on June 30.

A noteworthy development since last December is the sudden affinity of the trusts for steel shares. In December, steel holdings of the pros repre-

Moody's Investors Service also urges caution. "Many prices are getting temporarily full, and great care now is needed in any new buying."

"Favorite 50"

sented a negligible percentage of their portfolios, with only Bethlehem Steel in the top 50. At the end of June, steels comprised 5.3% of the total; U.S. Steel and Republic had joined Bethlehem on the list.

Amerada Petroleum continues to lead the 50 stocks. Westinghouse Electric and General Motors jumped into the top 10, displacing Union Carbide & Carbon and Standard Oil (Calif.).

Along with the heavy buying of steels—which may wane with the collapse of the Bethlehem-Youngstown merger—were marked pickups in other metals shares and building equipment.

Rank by Market Value

Dec. 31, 1952
June 30, 1953
Dec. 31, 1953
June 30, 1954

				Market Value (Millions)	Trusts Owning Shares Shares Held	Shares (000's) Held	% of Issue Held
1	1	1	1	Amerada Petroleum.....	\$90.1	36	511 16.21%
6	6	3	2	General Electric.....	74.7	75	1623 1.88
14	5	2	3	E. I. du Pont de Nemours.....	65.9	75	492 1.08
4	4	4	4	International Paper.....	62.2	62	841 8.59
2	2	3	5	Standard Oil (N. J.).....	61.3	80	711 1.17
11	12	11	6	Westinghouse Electric.....	49.8	72	685 4.28
8	8	6	7	Texas Co.....	48.4	57	728 2.65
5	7	7	8	B. F. Goodrich.....	47.8	45	509 12.12
3	3	8	9	Continental Oil.....	47.7	59	732 7.51
10	11	13	10	General Motors.....	47.6	66	655 0.75
12	13	10	11	Union Carbide & Carbon.....	43.2	75	503 1.74
9	9	9	12	Standard Oil (Cal.).....	43.1	56	705 2.46
24	29	27	13	Bethlehem Steel.....	40.7	57	583 6.08
18	15	17	14	Atchison, Topeka & Santa Fe.....	37.9	48	342 7.04
32	27	22	15	Int'l Business Machines.....	37.7	32	126 3.07
7	10	12	16	Gulf Oil.....	36.6	56	670 2.73
33	21	18	17	Shell Oil.....	34.4	49	735 2.68
26	23	15	18	General Public Utilities.....	34.2	50	1053 10.79
13	14	16	19	Kennecott Copper.....	33.9	62	415 3.83
27	20	20	20	Aluminium Ltd.....	33.2	49	522 5.78
41	31	31	21	American Tel. & Tel.....	32.8	53	197 0.43
19	24	14	22	United Gas.....	31.5	54	1046 8.11
—	33	24	23	National Lead.....	31.3	40	627 5.55
15	16	21	24	Phillips Petroleum.....	30.2	63	508 3.48
—	—	25	United States Steel.....	28.2	51	576 2.21	
28	28	32	26	Socony-Vacuum Oil.....	27.6	58	639 1.83
—	40	30	27	Ohio Oil Co. (Ohio).....	27.2	54	445 6.78
21	22	19	28	Sears, Roebuck.....	26.5	34	409 1.69
48	39	29	29	Texas Utilities Co.....	26.3	32	465 7.87
42	35	41	30	Seaboard Air Line RR.....	26.0	33	458 19.49
17	26	23	31	Dow Chemical.....	25.3	47	620 2.74
30	32	28	32	Niagara Mohawk Power.....	25.3	58	840 7.27
50	45	38	33	Goodyear Tire & Rubber.....	25.2	38	382 8.45
—	—	34	Mid-Continent Petroleum.....	25.0	19	295 15.85	
22	30	42	35	Standard Oil (Ind.).....	25.0	37	321 2.09
35	37	26	36	Central & Southwest Corp.....	24.5	48	947 10.42
23	19	25	37	Middle South Utilities.....	24.5	47	823 11.54
29	25	36	38	Monsanto Chemical.....	24.0	45	265 5.04
—	—	44	39	Louisiana Land & Exploration.....	23.5	27	359 12.07
20	18	40	40	Southern Pacific.....	21.8	41	519 5.74
25	38	33	41	American Gas & Electric.....	21.6	38	583 4.61
49	—	42	42	Phelps Dodge Corp.....	21.4	40	529 5.21
—	—	43	Republic Steel.....	21.4	36	367 6.16	
34	42	43	44	Firestone Tire & Rubber.....	21.3	23	284 7.16
—	—	45	Southern California Edison.....	21.3	41	486 6.99	
—	—	46	United Aircraft.....	21.1	52	317 9.84	
—	—	49	Allied Chemical & Dye.....	21.0	29	229 2.59	
—	—	48	Union Pacific RR.....	20.9	28	155 3.50	
31	36	35	49	Panhandle Eastern P. L.....	20.7	31	275 8.13
—	—	50	United States Gypsum.....	20.6	27	122 7.62	

opens itself ...

closes itself ...

pays for itself



A STOP WATCH SURVEY of your plant operations will prove to you that ECONOMATIC Door Operators save materials handling time and will actually pay for themselves in short order! And the savings are big, because 26% of production time in the average plant is spent in materials handling.

ECONOMATIC effects additional savings for you by improving temperature and humidity control, and also provides positive fire protection and prevents damage. Get complete details—send coupon today!

NATIONAL PNEUMATIC CO., INC.

AND
HOLTZER-CABOT

DIVISIONS

125 Amory St., Boston 19, Mass.

Sales Service Representatives

in Principal Cities throughout the World

Designers and manufacturers of mechanical, pneumatic, hydraulic, electric and electronic equipment and systems

Automatic Door Division
National Pneumatic Co., Inc.
125 Amory St., Boston 19, Mass.

Please send me the facts on how Automatic Doors can save me money and manpower.

NAME _____

COMPANY _____

STREET _____

CITY _____ ZONE _____ STATE _____

James P. Mitchell, finishing up his first year in the "impossible" job of running the Labor Dept., isn't trying to duck trouble. Sometimes it comes from the floor of a union convention (page 171), sometimes from within the Administration. Either way, he is . . .



Taking Trouble in His Stride

When James P. Mitchell took over as Secy. of Labor one year ago this week, many political experts thought he was stepping into an impossible job. The theory was that it would take a man of genuinely dual personality to remain acceptable to both the Republicans and the unions.

Supporting this idea was the dramatic resignation of Mitchell's predecessor, Martin Durkin. Durkin simply gave up, convinced that it was impossible to bridge the gap between the Administration and labor.

Taft-Hartley was the Secretary's first test. Though he couldn't get the White House program for amending the labor-management law through Congress, he did get out of a tough situation relatively unscathed. Since then, it has been mostly smooth sailing—politics excepted, perhaps—at the Labor Dept.

• **Trouble Within**—But there's a cloud over the future. And it didn't blow in from the vocal opposition supplied by leaders of organized labor.

Mitchell's new troubles stem from within the President's Cabinet in the

person of Commerce Secy. Sinclair Weeks. Basically, their dispute is a philosophical difference between the liberal and conservative branches of the Republican Party, but it has focused recently in two specific areas:

- A copper strike, which has cut production to the point where copper fabricators are being forced to close up shop for lack of supplies. Weeks urged that metal earmarked for the strategic stockpile be diverted to fabricators to keep the plants operating; Mitchell countered with a demand that the government keep hands off.

- A move by the Commerce Dept. to bring labor unions under federal antitrust laws. The Labor Dept. is fighting to head this off.

- **The Score**—The first case Mitchell has already won. The second figures to be tied up in debate through many months, at least until the political air has cleared after this November's elections.

But the copper situation shows the contrast between distinct approaches of the men who look after the interests of labor and business in the Eisenhower

regime. It seems certain to recur again and again.

- **The Fuse**—Two big strikes started the trouble. In this country, the independent Mine, Mill & Smelter Workers struck in August against the four major copper producers—Kennebunk, Anaconda, Phelps-Dodge, and American Smelting & Refining—as well as against some smaller producers. Concurrently, labor unions struck copper mines in Chile, which produce and ship refined copper ore to U. S. producers.

The loss so far due to mine strikes, according to government figures, is 40,000 tons, or about one-half of monthly U. S. production. Strikes in Chile cut copper imports 12,000 tons and sent up the price on the London market above the U. S. price of 30¢ a lb. So long as this condition exists, it will discourage imports.

While Mine-Mill has settled with most mining firms the United Steelworkers (CIO) has closed down the copper refinery of American Smelting. As a result, even though production is coming in again, the shutdown of American's giant smelting plants has



STYROFOAM'S EASE OF INSTALLATION, LONG SERVICE LIFE PAY DOLLAR DIVIDENDS TO DAIRY

Workable, light, easy to handle, this low-temperature insulation cuts installation costs . . . its resistance to mold, rot and water will mean long-range savings, too!



In this roof installation a 4" layer of Styrofoam 33 was secured to the bar joists. This layer was then covered with Portland cement mortar, in which a 4" layer of Styrofoam 22 was embedded. This second layer of Styrofoam was covered with Portland cement mortar. A built-up roof was then put on top of the Portland cement. Contractor was All-Tile, Incorporated, Kalamazoo, Michigan.



Two 4" layers of Styrofoam were used on walls in the sharp-freeze room. The first was bonded to the wall with cold-setting asphalt. The second layer was bonded to the first with Portland cement mortar. The walls were finished with Portland cement plaster.



An inside view of the roof installation. The Styrofoam was secured to the bar joists by bearing plates on the upper surface and by wires fastened to the bar joists.

Southern Dairies, Inc., Washington, D. C., chose Styrofoam® (Dow's expanded polystyrene) for their -25° F. ice cream hardening room for two good reasons:

First, *Styrofoam is easy and economical to install.* It comes in convenient three- and nine-foot lengths. It's light in weight, clean and easy to handle. It's simple to lay, easily worked by hand or power tools and can be bonded with inexpensive adhesives. As a result, the installation job proved quick, trouble-free, with a minimum of time and labor required.

Secondly, *Styrofoam has long service life.* It's resistant to mold, rot and vermin. Its low "K" factor and high insulating efficiency rating are permanent because Styrofoam won't pick up moisture.

The long-lasting properties of Styrofoam virtually eliminate any future need for costly replacement or repair.

Added considerations were Styrofoam's high flexural strength of 7,400 lbs. per square foot, which enabled direct spanning over bar joists eliminating the roof slab. Its attractive appearance meant the ceiling did not have to be finished inside.

If your future plans require insulation for low-temperature rooms, insulated vehicles, refrigerated equipment, pipe covering or perimeter insulations, specify Styrofoam. For further information contact your nearest Dow Sales Office or write Dept. PL 652A right away for the name and address of your nearest distributor. THE DOW CHEMICAL COMPANY, Midland, Michigan.

you can depend on DOW PLASTICS



you should know

in INDUSTRIAL COLORADO
—distribution center of America—
there are 7 major railroads,
airlines, 100 trucking firms!

Colorado Department of Development
2 State Capitol
Denver 2, Colo.

COLORADO CLIMATE...THE MAGIC INGREDIENT

DON'T BUY... Lease
YOUR TRUCKS

From experienced NTLS suppliers
of "All-Service" leasing

National
TRUCK
LEASING SYSTEM

Ask our best boosters—NTLS customers! Locate
our operating company in your area by this
trade mark in the phone book. To learn how
truckleasing releases capital,
gives you a perfectly main-
tained fleet engineered for your
use—everything supplied but
the driver—write for directory
of NTLS leasing companies and
brochure.

NTLS
Dept. B-10,
23 E. Jackson Blvd. Chicago 4, Ill.

We'll buy your
present fleet!

help wanted

- every business man needs help—and needs it badly—at some time or other.
- If you have a business service that will help America's business executives—the readers of **BUSINESS WEEK**—then tell them through the Business Services Section.
- Just write Classified Division,
BUSINESS WEEK, 330 W. 42nd St., NY 36

successfully bottlenecked the refined ore from reaching copper fabricators.

• **Full Scale Debate**—This is where Weeks took a hand. The copper consumers advised him that they would have to start trimming operations unless the government diverted production headed for the federal stockpile to private industry. The Commerce chief took their case to the Office of Defense Mobilization, which handed it to the Defense Mobilization Board.

DMB, composed of heads of federal agencies, took up the matter last week. Mitchell and Weeks, as members of the board, debated the issue face-to-face before ODM Director Arthur Flemming. Next day, Flemming announced stockpile supplies would not be diverted to private industry. The argument lined up this way:

• Weeks held that the diversion move was necessary as a service to business; that it was the Administration's responsibility to get the industry out of a tough spot. He also argued that it would benefit labor to keep the mills operating instead of being forced to shut down and lay off workers.

• Mitchell's stand was that no national emergency was involved (defense requirements amount to only 10% of production) and that to turn federal copper supplies over to private producers could be labeled strikebreaking.

• **Outcome**—Mitchell is reported to have carried the support of DMB principally through maintaining that the Administration must stay neutral in labor disputes; that it had already assumed a hands-off role in strikes where the unions asked for help (North American Aviation was an example), and that it would be wrong to shift its position because of a management plea.

Certainly, the political factor was a big part of ODM's decision but the outcome was only to reaffirm federal stockpile policy.

• **Fighting Talk**—The whole dispute probably would have been passed over, except perhaps in the Administration's inner circles, if Mitchell hadn't called one of his weekly press conferences.

Last week, the session started off typically in the Labor Secretary's office. He didn't have much to volunteer but invited questions—and the barrage

started. A reporter, noting differences over copper and antitrust issues, wanted to know how the "cold war" was going. "I don't consider it a cold war," Mitchell replied with a grin. "How about an armed truce?" he was asked. "No," said Mitchell.

The sparring continued with good nature. Mitchell, acknowledging differences with Weeks, said he hoped the Commerce views on labor didn't "gain ascendancy," but that every Cabinet member had the right to express opinions on Administration policy. And, though he didn't talk like a man in midst of a fight, he added, "I can take care of myself."

But this was fighting talk to reporters, and most news stories reflected it. Enough so that the Commerce Secy. later made an official comment denying a split with Mitchell.

• **Behind the Scenes**—There is more of a dispute going on than the Cabinet will admit to. But Mitchell, in denying a stalemated cold war, pointedly suggested that the press take a look at the Administration's program on labor to see who's winning. His latest victory was copper, but previously he had put through an unemployment compensation bill not popular in some Commerce Dept. circles. And in his initial battle over Taft-Hartley, the Labor Secy. kept out some Commerce-proposed amendments that would have hit hard at labor.

So far, it's the Mitchell programs that are getting support from Pres. Eisenhower, and there's no indication right now that this is going to change. But Commerce has at least stalled an Administration stand against bringing unions under the antitrust laws.

• **Rift**—There's one new trend that may hurt Mitchell. After an initial honeymoon with leaders of organized labor, Mitchell clashed head-on with them recently by frankly challenging some union policies at the AFL convention. While he later gained back some of the lost support by a first-of-its-kind question-answering appearance before CIO's International Union of Electrical Workers (Page 168), many union officials are now asserting that he doesn't speak for them. This weakens Mitchell's bargaining position in the Administration on the antitrust issue.

At the IUE: Questions and Answers

An address by the Secy. of Labor at a major labor convention is a traditional but usually a trite thing. There are exceptions, of course; Labor Secy. James P. Mitchell whistled up a storm in Los Angeles recently by chiding the American Federation of Labor at its convention for unfairness to the Eisenhower Administration. More often, a routine

speech will leave a dead calm.

Trying to get away from a repetition of past speeches, Secy. Mitchell tried something unique last week: After a short greeting to the International Union of Electrical Workers (CIO) at its convention in Miami Beach, the Secretary said that he would answer questions from the floor. The Secre-

ences
anted
going.
Mit-
about
"No."

good
differ-
d the
"gain
abinet
ress
olicy.
man
I can

o re-
s re-
Com-
com-
ll.

ore of
abinet
nying
sug-
at the
or to
factory
d put
pensa-
Com-
initial
Labor
e-pro-
ve hit

ograms
Pres.
eration
range.
ord an
nging

that
initial-
nized
with
nging
con-
back
of-its-
rance
on of
many
at he
akens
the
ue.

S

calm.
dition
tried
er a
ional
(O) at
the
answer
Secre-



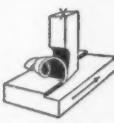
THE ENGINE LATHE uses a single-point tool restricted to chip-producing operations on the exterior surface of a rotating workpiece.



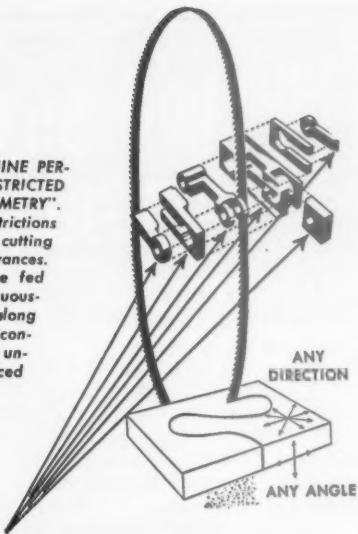
THE DRILL PRESS uses a revolving tool restricted to chip-producing operations penetrating into a fixed workpiece.



THE MILLING MACHINE uses a rotating cutter held in fixed position restricted to chip-producing cutting operations as workpiece advances.

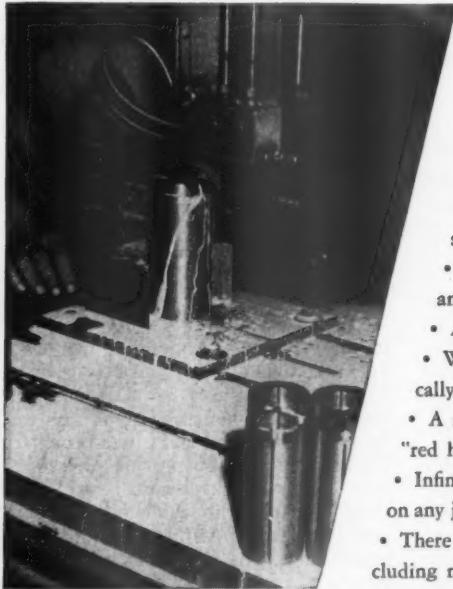


THE PLANER employs a single-point tool restricted to chip-producing, straight-line cutting on a plane surface as workpiece advances.



THE BAND MACHINE PERMITS "NON - RESTRICTED MACHINING GEOMETRY". There are no restrictions to the direction of cutting action as the cut advances. Hence, work may be fed to the narrow, continuous-cutting band tool along either a straight or "contoured" course. And unwanted material is "sliced off" in whole sections.

How the **"non-restricted Geometry"** of band machining can cut your costs!



Slotting operation on production parts being performed on DoALL Band Machine at half the cost of milling, the previous method used.

With modern DoALL Band Machines you can cut costs in slotting, splitting, cutting contours, cutting parts from the solid, notching and many other operations—on a high production basis. Here is why:

- New blades of high-speed steel provide revolutionary new production rates.
- The thin blade "slices" through metal, removing an entire section intact instead of whittling it down to a pile of chips.
- Straight cuts with good finishes can be made accurately at any angle to the face of the workpiece.
- Any internal or external shape or contour can be cut.
- Work is mounted on a tiltable table which feeds automatically by hydraulic power.
- A new built-in coolant system is employed with these new "red heat hardness" production band tools.
- Infinitely variable feeds and speeds provide optimum results on any job.
- There is a cutting tool for every job and every material including new DoALL Demon high-speed steel saw bands that cut up to 5 times faster and last up to 30 times longer than any previous saw band.

For a demonstration, call your local DoALL Store, or write:
The DoALL Company, Des Plaines, Illinois.



DoALL

Free: New wall chart "How Basic Tools Created Civilization." Make request on your company letterhead.

Band Machines, Saw Bands, Precision Surface Grinders, Precision Measuring Equipment, Black Granite Surface Plates and a Complete Stock of Cutting Tools at each of 38 DoALL Sales-Service Stores. Call DoALL.

tary didn't ask a screening of questions, and IUE didn't offer one. The result was a lively session that reviewed Mitchell's—and the Administration's—views on many of the issues that worry labor the most.

Here is a verbatim rundown of some of the questions and answers:

Pres. James B. Carey of IUE: "In view of the fact that Pres. Eisenhower mentioned only two provisions (of the Taft-Hartley Law, as changes he favors) are we to take it that the Administration believes that with the modification of only those two . . . the law will be fair?"

Mitchell: "The answer is, Mr. Carey, no . . . The President sent to Congress in January some 10 or 12 amendments."

Delegate: "Does the Administration believe that . . . recent decisions of the National Labor Relations Board carry out . . . the spirit and intent of the Taft-Hartley Act?"

Mitchell: "I believe its members are endeavoring to interpret (the) act in as fair a way as they possibly can. You may not always agree with them. I may not . . . but they are a judicial board."

Delegate: "Just what, if anything, has the Republican Administration done in behalf of the working people?"

Mitchell cited the amending of the Social Security Act, changes in the unemployment compensation program, the housing program, and the federal road building program. He said: "Our program has been directed at the working people . . . to the fullest extent that it is conceivable . . . in one legislative session."

Delegate: "Does the Administration intend to take any further steps to liberalize unemployment compensation benefits?"

Mitchell: "The law passed in the 1930s . . . provided that under certain minimum standards . . . the states had the authority and responsibility for determining the amounts and the duration of benefits." The Administration, he added, believes "benefits should be at least 50% of the earnings of the individual."

The Secretary said he has written governors urging that they review their state laws, and suggested that unions should join in seeing to it that "benefits paid by the states are adequate in terms of what the Administration believes adequacy to be."

Delegate: "What's the Administration position on a \$1.25 minimum wage?"

Mitchell: "I believe . . . there should be an increase in the minimum wage and . . . that more occupations . . . should be covered." He announced that the Labor Dept. is studying, and will announce shortly, its position on

"what this economy can stand in terms of an increased minimum wage."

Delegate: "How much longer must we wait for a proper minimum wage?"

Mitchell: "All I can tell you is that . . . we will endeavor to get it . . . as soon as it is practically possible."

Delegate: "What are the Secretary and the Administration doing in the field of workmen's compensation?"

Mitchell: "We are now engaged in trying to bring to the attention of the states—because that is our only recourse at this time—the inadequacy of the workmen's compensation laws (which) have not kept pace with wage schedules (and) in many states are discriminatory against workers." He announced that the Labor Dept. has developed "a model law" and is trying to get states to adopt it.

Delegate: "What is the Administration going to do, if anything, about the unemployment that results when companies move to the South or low-wage areas?"

Mitchell: "I might ask what authority . . . has the federal government to direct any employer as to where he should put his plants, and how, and why. . . . The answer is (union) organization."

IUE Board Member: "I would like to ask the Secretary . . . if Asst. Secy.

of Commerce Tydor was expressing Administration policy when he made this statement a few weeks ago: Regulation of labor unions should be turned over to the states."

Mitchell: "The answer is categorically, no."

Delegate: "I come from an area that (has) a serious unemployment situation, and I believe it has been caused somewhat by allowing . . . foreign concerns to bid for our work. . . . I think you should consider this problem very seriously."

Mitchell: "I agree with you that it is a serious problem. I would like to point out, however, that I believe the CIO is committed to the principle of free trade. . . . I think it is very difficult to decide what to do in the case of tariffs or the purchase of materials and products out of this country, but if you are committed to the principle of free trade, and if you are committed to the principle that all the world needs a higher standard of living . . . then these decisions . . . have to be made on the basis of particular specific instances. . . . The welfare of the American worker, the cost to the government of a product, the effect a purchase or a non-purchase will have in a foreign country . . . all of those items need to be considered."

LABOR BRIEFS

A wage guarantee negotiated by AFL's Bakery & Confectionery Workers and an independent bakery in Detroit, which employs 70, assures all now on the payroll of 40 hours' pay a week (32 hours in holiday weeks) for one year. The contract—which the union hopes to extend in the Detroit baking industry—also provides for a 7¢-an-hour pay hike and 50¢ a week more for fringes.

Ben Gold, who is appealing a conviction on charges of filing a false non-Communist oath under the Taft-Hartley law, last weekend resigned as president of the leftwing Fur & Leather Workers Union. Abe Feinglass succeeded him.

A textile strike by 5,000 CIO workers ended quickly in Paterson, N. J., last weekend when strikers—employed by 90 dyeing, finishing, and textile printing plants—voted to accept a new one-year contract without a pay increase.

Automatic elevators are cutting into operators' jobs, so a new contract negotiated by an AFL Building Service Employees' local in Chicago last week provides severance pay for those idled by

self-service equipment. Those with 20 years or more of service will get \$1,000 plus \$50 for each year over 20; others get \$100 for five years' service, \$50 for each additional year. Employers in other cities now face this demand.

In meat packing, Armour & Co. last weekend signed new contracts giving 35,000 CIO and AFL employees in 36 plants a 5¢-an-hour raise and 2¢ to 3¢ an hour in additional fringe benefits. The agreements also provide severance pay for workers whose jobs are abolished and who can't be assigned new ones paying within 15¢ of their former wage. The terms follow a pattern set a week earlier by Swift & Co.

In Canada, A. R. Mosher, president of the 325,000-member Canadian Congress of Labor, allied with CIO, last week cautioned CCL unions against new wage demands that do not "face certain realities," mainly that employers must be able to maintain a competitive position today or their business future—and jobs—may be jeopardized. . . . CCL and the Trades & Labor Congress, allied with AFL, with 655,000 members, have followed the AFL-CIO lead and signed a no-raiding agreement.

essing made
Regu-
turned
categori-
a that
ation,
some-
cerns
you
y ser-
that it
ke to
e the
le of
ficult
se of
s and
if you
's free
o the
rds a
these
n the
naces.
merican
nt of
or a
eign
d to



SITDOWNERS in Brooklyn plant get food by string. It's one last-ditch battle as . . .

UE Admits "Dark Days"

Worried by drooping membership, officials of leftist union buck up convention with reports of Square D pact and razor plant sitdown.

Effects of the many-pincer drive against Communist influences in labor showed sharply last week as the independent, leftwing United Electrical Workers held its annual convention in New York. Admitting these are "dark days for UE," James J. Matles, organizing director, warned delegates that UE's membership has shrunk 150,000 in recent years and that new, grim fights lie ahead.

Matles said that UE—which claimed 450,000 members when it left CIO in 1949—now has 294,529, a drop from 316,150 a year ago. UE's financial report hints at another, possibly more realistic figure: It shows that only 166,700 members paid dues to the once-powerful electrical union in the last fiscal year.

• **Mobilization**—Matles called for "a fighting program" to help UE recoup its lost strength. At the same time—either by coincidence or by strategic scheduling—UE demonstrated that it is still a militant, disciplined union. Two announcements bolstered the delegates' spirits:

• UE's long and bitter strike against Square D Co., in Detroit, had ended with the union there still intact—at least temporarily.

• The union's Local 745 had revived the old sitdown strike technique against American Safety Razor Corp., in Brooklyn, where, according to UE offi-

cers, workers were in "a heroic battle" to block the transfer of production to a plant in Staunton, Va.

• **Assist From UAW**—UE's strike at Square D ended after 108 days with the union intact—but only the most rabid UE supporters doubt that a change is in the offing. As 1,200 workers returned to jobs, jubilantly, many gave CIO's United Auto Workers as much credit as UE for the strike settlement.

With them, the big questions seemed to be how long it would take to get rid of their leftwing union, and where they might go.

To most, any shift from UE should be to UAW, although the International Union of Electrical Workers (CIO)—instead of UAW—rightfully would have CIO jurisdiction at Square D. When the company tried to break the UE strike, IUE stayed on the sidelines, but UAW pitched in to help the strikers. UAW locals practically took over running the picket line at the end, and while UE negotiated with management it was UAW that suggested the formula to end the walkout.

Under its terms, Square D gave a 4¢ pay hike and an additional paid holiday. In return, it won a stronger no-strike clause—though not so ironclad a ban as it wanted. Cases involving the employment rights of 27 workers discharged for "acts of violence" during

With Revolutionary Machine . . .

End Copying Bottlenecks Automatically

A Low Cost Complete Photocopy Department All In One 20 inch Unit



All Electric! No Installation! **APECO Auto-Stat** SYSTEMATIC

Right in Your Own Office Photocopy Anything Written, Printed, Typed, Drawn or Photographed in Less than 45 Seconds

Solve the problem of handling your paper work in a hurry with the new Apeco Systematic Auto-Stat. With this quick copying machine, thousands of firms have eliminated 35% of all typing and actually cut paper work in half. Anyone can operate it . . . just flip a switch and any papers, opaque or transparent, can be copied in seconds no matter if printed on one or two sides. It's low cost, too . . . priced within the budget of the smallest business.

Lifetime Service Guarantee with Every Apeco Auto-Stat

Send for NEW FREE Book



American Photocopy Equipment Co., Dept. A

1957 W. Peterson Ave., Chicago 26, Ill.

Rush me without obligation your new book the "Auto-Stat Story." I understand this is a report on Auto-Stat copying and shows how this machine can increase the efficiency of any business.

NAME _____

FIRM _____

ADDRESS _____

CITY _____ STATE _____

In Canada: APECO OF CANADA, LTD., 134 Park Lawn Road, Toronto, Ont.

Certified
for plant locations



under the
National Industrial
Dispersion Program

In addition to many other advantages to manufacturers, the whole state of North Carolina has now been certified as meeting requirements for the location of industry in the National Industrial Dispersion Program.

Also, FIVE NORTH CAROLINA AREAS HAVE BEEN CERTIFIED FOR THE O.D.M. ACCELERATED TAX AMORTIZATION PROGRAM.

In the South's leading industrial state, labor is not only plentiful, but has a proven record of cost-saving productivity.

For a copy of the North Carolina industrial brochure, containing concise information about many important plant location factors, write, wire or phone Ben E. Douglas, Director, Department of Conservation & Development, Raleigh 4, N. C.

Friendly
North Carolina
Where
Industry Prospects

the walkout will be handled through grievance procedures or, if necessary, through arbitration.

• **Sitdown Strike**—UE's sitdown strike against American Safety Razor Corp. involved about 200 workers (of 750) at the start, but dwindled early this week to 75 as the company went to court for an order to evict workers.

Last July, the company sold its Brooklyn plant and bought a new one in Virginia. It notified workers that it would keep the New York plant open until May, 1955; pay moving costs for employees and their families willing to shift to Virginia; and provide pensions and severance pay for those staying behind. It attached one string to the plan for "orderly transfer" of operations: UE must guarantee full and peaceful production and give assurance that it wouldn't stand in the way of the transfer.

After five weeks of opposition to the plant removal—as "runaway" tactics—UE agreed to the plan, but, according to the company, it continued its attacks against ASR. As the dispute over terms of moving broke out all over

again, workers began their sitdown strike last week.

The Pictures—American Machine & Foundry Co.—52; Brown Bros.—25 (second from top); Henry G. Compton—119; George Harris—54, 55; Harris & Ewing—25 (third from top), 79, 162; International News Photos—31, 140 (top); Herb Kratovil—28; Archie Lieberman—Cover, 62, 63, 108, 110, 112, 114; McGraw-Hill World News—140 (bot.); Edith Miller—92, 93, 103; Ed Nano—130; National Rubber Co.—136; N. Y. Daily News from Gilloon—171; N. Y. State Commission Against Discrimination by Dick Saunders—180 (rt.); Our World by Wilbert Blanche—180 (bot.); Warner Bros.—158 (bot.); United Artists—158 (top); United Press—31, 32; Visking Corp.—144 (rt.); Wide World—12, 25 (top, fourth from top, bot.); 172, 180 (top); William Bros Boiler & Manufacturing Co.—144 (lt.).



PICKETS RETURNED to New York's docks this week—but only for two days as . . .

Raise Stops ILA Dock Strike

For a time this week, New York's bustling port appeared likely to be tied up for a second time in six months. The old International Longshoremen's Assn., having forced AFL challengers into inglorious retreat (BW—Sep. 25 '54, p29), sent pickets to the piers in a move to force employers to give an immediate retroactive wage increase.

Picketing was effective; 25,000 longshoremen stayed off jobs, with the usually paralyzing effect on cargo loading and unloading. But mediators got parties together quickly in an agreement on (1) an 8¢ hourly wage increase retro-

active from Sept. 30, 1954, to Oct. 1, 1953, and (2) a strike truce while the parties bargain without pressure on nonwage terms of a new contract.

The strike truce agreement—hailed by employers as "a progressive step toward eliminating the work stoppages which have plagued the port in the past"—provides that the parties will bargain for 45 days "during which there will be no strike." At the end of that period, the agreement stipulates, the parties will "agree or disagree on mediation or arbitration of the issue or issues in dispute."

BUSINESS IN MOTION

To our Colleagues in American Business ...

Copper sheet has been used as a gasket material ever since gaskets became necessary to seal a joint. When the joint is tightened, the copper accommodates itself to the slight irregularities of the opposite faces. Thus, leaks are prevented. Customarily, gaskets, whether round or in other shapes, have been punched and stamped out of sheet. It has always been done that way. However, Revere found a different and better way for one of its customers — slicing copper tube into circular gaskets.

This new idea was developed when a manufacturer of diesel fuel injection pumps asked us to study its pump and recommend the correct type of copper for the gaskets. That request alone showed considerable originality, because so many people seem to think that copper is just copper, when as a matter of fact there are a number of different types, each having its own special characteristics.

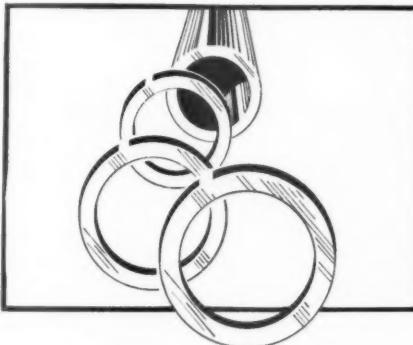
Analysis of the service expected of the pump showed that the requirements were severe. The pump is used to feed large engines for municipal generating plants, and weighs 186 pounds. It has to produce the high pressure required to force the fuel into the engine cylinder near the top of the compression stroke. Therefore, the load is not only heavy, but pulsating. Revere recommended deoxidized copper as embodying the best combination of strength with ductility.

Then came the brand-new idea — why not cut the gaskets from tube, instead of punching them from sheet? This would have two big advantages. First, scrap would be greatly reduced; there would be much less of it to handle and sell. Second, deoxidized copper tube is readily available at no premium in price. The customer was convinced that this would improve the pump and ordered the tube. This took place about a year and a half ago, and in response to a recent inquiry, the manufacturer reported that gasket performance in this rugged service has proved entirely successful since adopting the Revere suggestion.

Perhaps other people have thought of making gaskets out of tube; we do not know. All we are certain of is that we developed the idea on our own. There is no patent on it, and anybody

can use it who wants to. Gaskets are quite important items, though usually small. Millions of copper gaskets are used yearly. They are stamped out of sheet and strip for use in spark plugs and cylinder heads, to name just two vital automotive applications.

Originality of thought is most important, and we Americans are blessed with it; we do not hesitate to question the customary, and see new ways of doing things. Why not ask your suppliers, no matter what they ship you, if they cannot come up with something new and original?

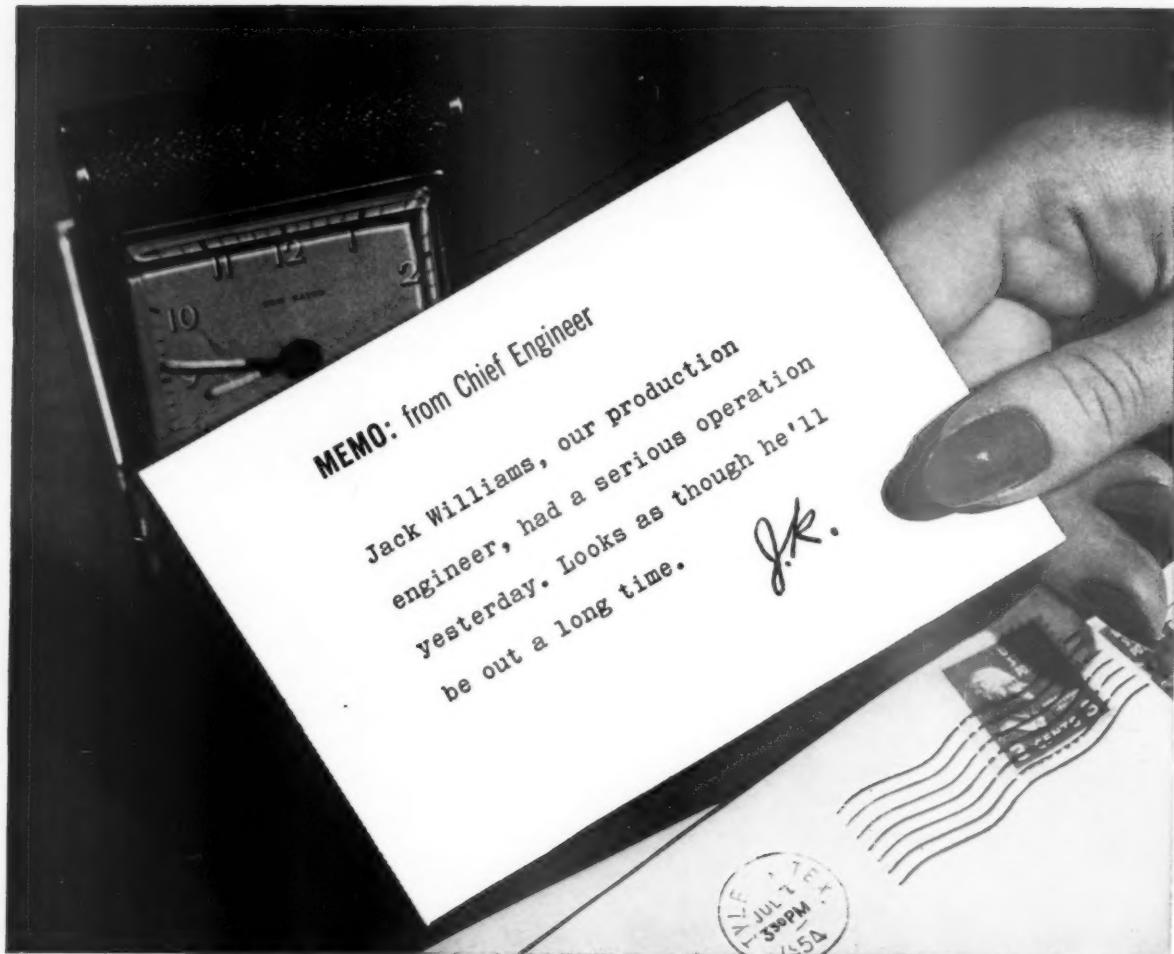


REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

Executive Offices: 230 Park Avenue, New York 17, N. Y.

SEE "MEET THE PRESS" ON NBC TELEVISION, SUNDAYS



HOW YOU CAN HELP YOUR EMPLOYEES MEET MAJOR MEDICAL EXPENSES

Equitable offers management a way to lighten the burden of ruinous medical bills for its employees

A heart attack...cancer...a bad accident. These *can* happen to your employees and their families!

A prolonged illness or a serious accident can pile up staggering medical bills. As a result, an employee who returns to work deep in debt may be distracted and worried—unable to keep his mind on his job.

The problem management faces

Modern management—in cases like this—is sympathetic and understanding...and aware of a fundamental obligation.

Equitable offers an answer: three

basic Group Major Medical Expense Plans, any one of which can be adapted to your company's needs.

This type of protection is vital, *whether or not* your employees are now covered by the usual medical and hospitalization plans.

How the Equitable Plans work

These far-reaching Equitable Plans help your employees pay for costly major medical expenses—bills for physicians, surgeons, medicines, hospital, professional nursing care and other items that can quickly wipe out an employee's life savings.

The cost of this insurance is amazingly low compared to the protection it gives you and your employees.

Your Equitable Representative can help you bring to your employees—and to yourself—peace of mind. The Equitable also offers *Individual Major Medical Expense Policies*, for both you and your family.

THE

EQUITABLE

LIFE ASSURANCE SOCIETY OF THE U.S.
HOME OFFICE: 393 SEVENTH AVE., NEW YORK 1, N.Y.

PERSONAL BUSINESS

BUSINESS WEEK
OCT. 9, 1954



A lot of advantages of the family trust arrangement have been obscured because of over-emphasis on one advantage—the trust's tax-saving role.

That's understandable. Probably no other property arrangement can yield the same tax savings as a properly designed trust. This applies both to an individual's current income-tax bills and estate-tax levies against his property on his death.

The reason is that the trust's income is taxed in a lower bracket. Its income starts at zero, and it is taxed separately—not on top of the individual's other income.

Thus an individual can use a trust to increase his family income while he's alive, as well as for avoiding the estate tax on the property that will pass to his heirs. In this light, a trust carries profit possibilities hard to duplicate in standard investment.

This tax angle is a fairly new one—it's due to the increase in tax burdens over the past 25 years.

But if you're thinking of setting up a trust, keep in mind five other traditional advantages. These advantages are based on the fact that the actual ownership and management of the property are given to persons trained for this purpose. They are:

- **Efficient management.** A trust can protect your dependents and your beneficiaries from speculative and mismanagement losses. It gives continuous, professional management in property transfers either as gifts during lifetime or legacies at death.

- **Protection for inexperienced beneficiaries.** Outright ownership of securities and other investment properties almost inevitably brings business worries and responsibilities. Chances are that you'll have beneficiaries with no experience along these lines.

Through a trust, you can shield such beneficiaries from the hazards involved—through the simple process of separating the benefits of property ownership from its responsibilities. It gives a responsible trustee the job of administering the property correctly and efficiently.

- **Control of property after death.** In effect, a trust enables its deceased creator to continue his lifetime control over his property.

You can be sure that the specific instructions you wish to apply to property will be faithfully observed and followed. And you can concretely chart your property's future course and dictate its future uses.

- **Property is kept intact in one fund.** Keeping everything in a cohesive, centrally managed unit is particularly important with respect to property and securities left at death.

Dismemberment of any large property fund usually brings losses to the estate—a number of smaller and separately managed parts can be subject to the wishes and control of different individuals. A trust, on the other hand, can keep control and management in one place.

- **Strong legal protection.** No body of laws is more strictly administered by the courts—or gives more complete protection to those who come within its coverage—than those applying to trust funds.

In other words, a trust builds the strongest possible legal defenses around a property. And that protection extends equally to the trust itself, its creator, and its beneficiaries.

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

OCT. 9, 1954

A trust can be designed to take as many different forms as there are family situations and problems. Yet you can weld these five advantages—plus, of course, the tax break—into every trust arrangement.

Make sure you set up your trust fund properly. If you do, it's virtually guaranteed that your property and income will be protected, maintained under tight control, and dedicated to your express purposes.

The long-awaited, one-volume edition of Carl Sandburg's Abraham Lincoln (Harcourt-Brace; \$7.50) is published this week. It leads the list of important fall books.

Some others on the list are worth your attention for play and leisure. You can get them at or through your bookstore:

- The Man in the Thick Lead Suit, by Daniel Lang (Oxford; \$3.50) is a series of 10 accounts of men and events ushering in the atomic age.

- Lord David Cecil's Melbourne (Bobbs-Merrill; \$5) is an autobiography of Queen Victoria's first Prime Minister. It includes The Young Melbourne (published in 1939), but the major part of the book is new.

- Sunk, by M. Hashimoto (Holt; \$3.95) is a first-hand account of the Japanese submarine fleet during World War II. It's an appalling story of inadequacy and eventual destruction.

- Adventures in Water-Color Painting, by Paul Montgomery (McGraw-Hill; \$3.50). A stimulating and encouraging how-to-do-it textbook for amateurs.

- Fish Cookery, by James Beard (Little, Brown; \$4.95), gives scores of recipes for every kind of seafood in all manner of preparation.

- Who Knows—and What (A. N. Marquis; \$18.60), lists thousands of authorities, experts, and others specially informed on almost any subject you can think of.

Watch for these three books, due out next week: Sweet and Sour, by John O'Hara (Random House; \$3), a collection of his recent newspaper columns on books and people; Tactical Exercise, by Evelyn Waugh (Little, Brown; \$3.75), a collection of short stories by the British author; and another Jalna novel, by Mazo de la Roche, Variable Winds at Jalna (Little, Brown; \$3.95).

Apartment-house tenants should look for a new type of "multiple-peril" insurance. Available in New York State now, it's almost certain to spread.

The policy has a number of features. One is coverage of tenants' personal belongings against several hazards, including fire, wind, and theft. In addition, it takes care of personal liability (excluding automobile liability) and insurance on personal luggage and its contents.

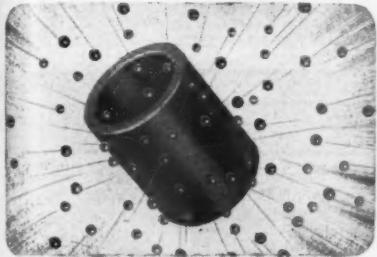
Only one company—Chubb & Son—writes the insurance at the moment. New Yorkers can get it through an agent or broker from them.

You can now buy your own personal submarine from Abercrombie & Fitch. Called the Mini Sub, it's a freely flooded underwater craft designed to carry two men or one man plus cargo. A cockpit-like design insures all-around visibility.

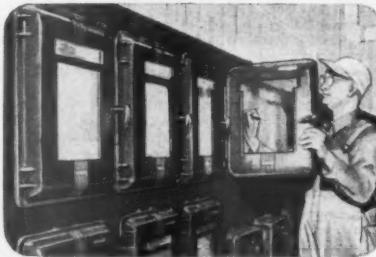
There are two models. One, driven by foot pedals, sells for \$4,850. A motor-driven model costs \$6,000.

Contents copyrighted under the general copyright on the Oct. 9, 1954, issue—Business Week, 330 W. 42nd St., New York, N. Y.

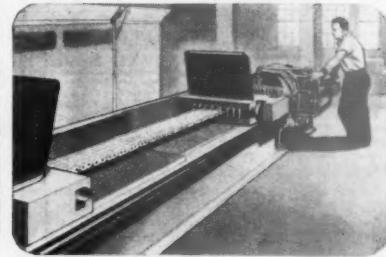
LINK-BELT RESEARCH AND ENGINEERING...WORKING FOR INDUSTRY



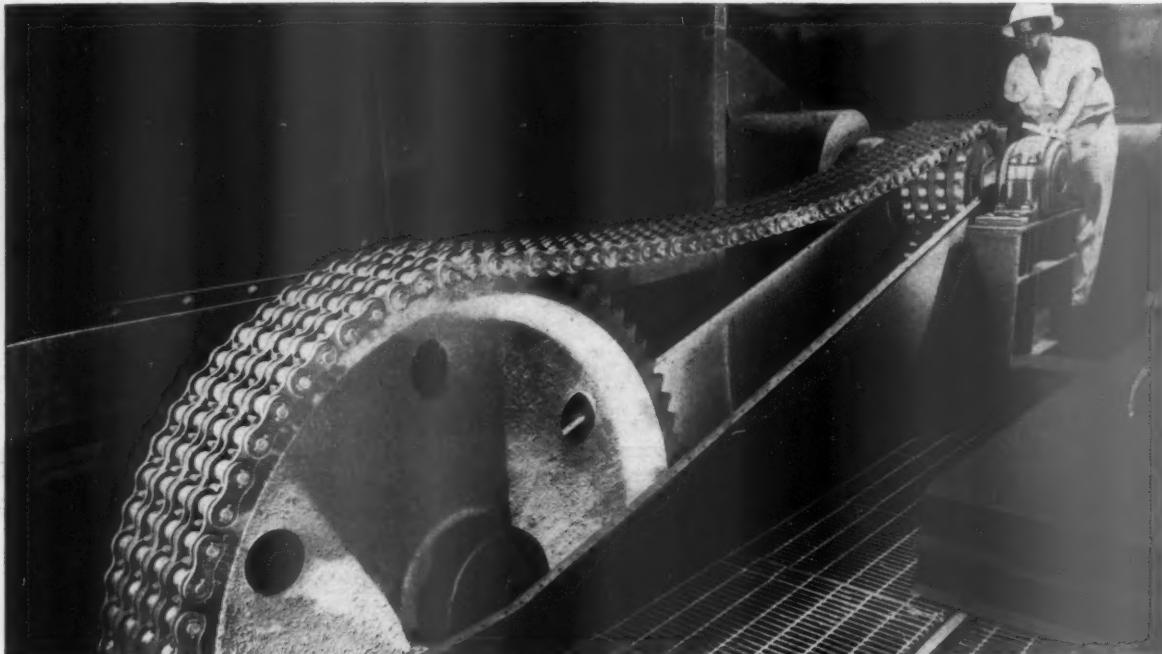
SHOT-PEELED ROLLERS have greater fatigue life, added ability to withstand impact.



CLOSER HEAT-TREAT CONTROL, coupled with rigid testing, insures uniformity.



PRE-STRESSING of multiple-width chain provides uniform load distribution.



This Link-Belt Precision Steel Roller Chain drives a Link-Belt feeder built to handle 6000 long tons of ore per hour.

Link-Belt takes these extra steps
in the manufacture of roller chain to give you
extra life in drives and conveyors

WHERE power must be transmitted unfailingly under demanding conditions of shock and impact, Link-Belt Precision Steel Roller Chain is the choice on an ever-increasing number of jobs like this huge iron ore feeder. Here is a driving and conveying medium that retains its better-than-98% efficiency throughout long years of service.

The reason: *Link-Belt builds extra life into every member of every link.* Added steps in manufacture . . . continuous testing and control . . . rigid inspection—all are combined to produce a chain that cuts power transmission and conveyor costs.

The complete Link-Belt line includes roller, silent, and all types of cast, combination, forged and fabricated steel chains. And chain, in turn, is only part of

the extensive line of equipment Link-Belt builds for all industry's power transmission and materials handling needs.

For an expert appraisal of your drive and conveying requirements, contact the Link-Belt office near you. And for facts on roller chain, write for 148-page Data Book 2457. **LINK-BELT COMPANY**, Dept. AV, 307 N. Michigan Ave., Chicago 1, Illinois.

15,878

LINK-BELT



One source . . . one responsibility for materials handling and power transmission machinery

LINK-BELT COMPANY: Executive Offices, 307 N. Michigan Ave., Chicago 1. To Serve Industry There Are Link-Belt Plants, Sales Offices, Stock Carrying Factory Branch Stores and Distributors in All Principal Cities. Export Office, New York 7; Canada, Scarborough (Toronto 13); Australia, Marrickville, N.S.W.; South Africa, Springs. Representatives Throughout the World.

EFFECTIVE LETTERS IN BUSINESS

You can make your business letters get attention, arouse interest, and win the answer you want, when you use this practical guide. It gives concrete pointers on how to apply tested techniques in answering routine daily mail, writing sales letters, credit letters, letters of application, etc. The Second Edition was revised to include new material on importance of letter writing to the individual and to the company . . . how to make memorandum better tools of business . . . checklists for rating appearance and effectiveness of letters, etc. By R. L. Shurter, Prof. and Head, Dept. of Language and Lit. Case Inst. Tech. 2nd Ed., 300 pp., \$3.95



TECHNIQUE OF EXECUTIVE LEADERSHIP

Noted authority shows you 10 ways to develop executive leadership qualities. Tells how to analyze yourself, streamline your mind, be a pleasure to work with, speak like a speaker, improve your reading habits, master the interview, conduct excellent conferences, be a good psychologist, get the most out of your physique, and stay tuned to modern leadership. Shows you how to gain greater prestige and financial success by increasing your capacity to handle more responsibility. By James F. Bender, 291 pp., \$4.00

OPEN THE MIND AND CLOSE THE SALE

The Key to Success in Selling. Meet today's stiffening sales challenge with these creative selling techniques. John M. Wilson, Vice President, Sales, The National Cash Register Company, shows how to plan every sale with the creative, organized approach that wins business for you . . . helps you successfully close sales where other fail! Tells how to be your own manager in a way that sparks your best efforts, leads to better sales training, and makes your sales time more productive. 256 pp., 33 Illus., \$3.75



PUBLICITY for PRESTIGE and PROFIT

Manual of practical methods for keeping individual and company names before the public, creating favorable opinions of them, winning acceptance of ideas, services, and products. Covers whole field—how to prepare and place material in press outlets, use same media as television, company magazines, speeches by company personnel, even such subjects as planning publicity budgets, offsetting bad news, taking industrial photographs. By H. Stephenson, Pres., Comm. Relat., Inc. and W. F. Pratzner, Prof. of Pub. Relat., Boston U. 300 pp., \$4.50

FREE

10 DAY EXAMINATION
MAIL COUPON BELOW

McGraw-Hill Book Co., Inc., Dept. BW-10-9
330 W. 42 St., N. Y. 36

Send me book(s) checked below for 10 days' examination on approval. In 10 days I will remit for book(s) I keep, plus a few cents for delivery, and return unwanted book(s) postpaid. (We pay for delivery if you remit with this coupon—same return privilege.)

- Shurter—*Effect. Letters in Business*—\$3.95
- Bender—*Tech. of Executive Leadership*—\$4.00
- Wilson—*Open the Mind & Close the Sale*—\$3.75
- Stephenson & Pratzner—*Publicity for Prestige and Profit*—\$4.50

(PRINT)

Name

Address

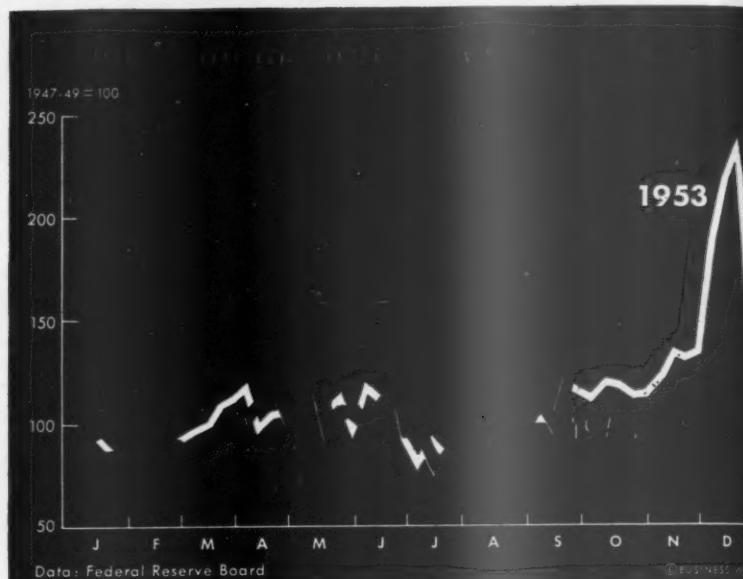
City..... Zone..... State.....

Company

Position ..
This offer applies to U. S. only.

BW-10-9

CHARTS OF THE WEEK



1953

© BUSINESS WEEK

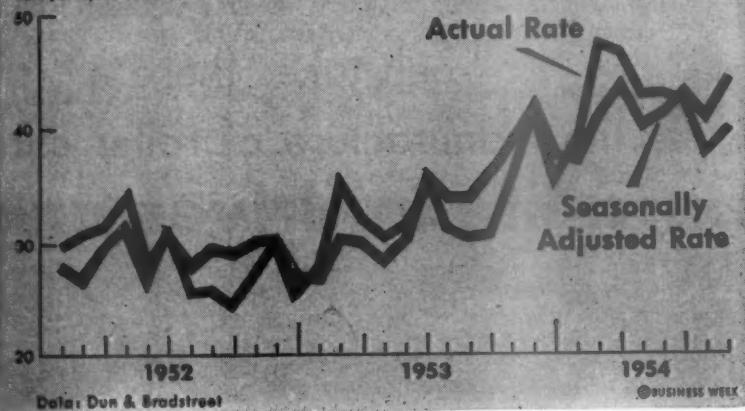
Under 1953 but Improving

Department store sales have turned upward in recent weeks. At the end of July they were 4% below last year, but higher retail buying has boosted the in-

dex to a point only 2% below 1953. It begins to look as if the department stores could have almost as good—or maybe even just as good—a year as last.

Business Failures

Rate per 10,000 Concerns



Number Down, Trend Rising

When you look at the movements of Dun & Bradstreet's index of business failures (black line on chart), you get the impression that failures, though still at a high level, have become less numerous since 1954 began.

But look at this same index after it has been adjusted for seasonal ups and downs in the failure rate (color line on chart), and the picture changes somewhat. In August this year, the seasonally adjusted rate stood at 44.1 failures per

10,000 concerns—a postwar high for any month and the severest rate for August since 1941.

Total liabilities involved in failures

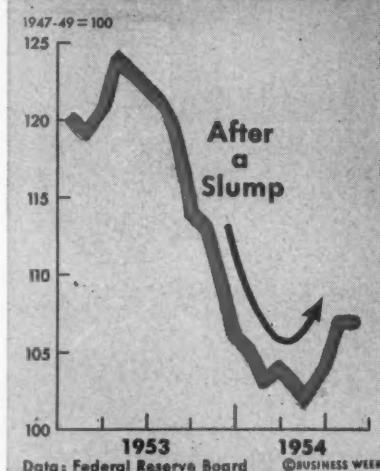
also increased in August; for the eight months the total reached \$322-million. That was 32.7% above the same period in 1953.

Furniture Picks Up

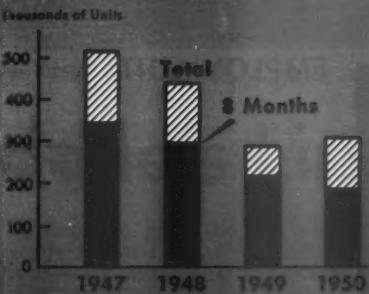
Furniture manufacturing, like other durable goods lines, has been in a slump, but now appears about to make some recovery. Last May (according to the Federal Reserve Board's seasonally adjusted index), output was 17.1% below May, 1953. Since then, the declines from last year have been getting smaller. August output was only 10.1% below August, 1953.

August activity indicates further improvement in September. Unfilled orders in August climbed 9%, although shipments during the month increased 32% over July, according to the monthly figures of Seidman & Seidman's Furniture Industry Bulletin. The bulletin also reports for August a 4% rise in new orders, and an increase in factory operating hours to nearly 42—highest since February, but under the 44 hours worked in August, 1953.

Furniture Production



U. S. Auto Exports...



...Ahead of Last Year

But There's Strong Competition

Although U.S. auto and truck exports for the first eight months of 1954 are ahead of the like 1953 period, the American manufacturer hoping to sell in the foreign market sees little encouragement. Since 1947, U.S. exports of motor vehicles have been declining—though you might have expected the expanding industrial activity of Europe to brighten the U.S. export picture.

This has led American companies to look around for more effective ways of competing with foreign vehicles in the European market. General Motors is reported expanding the capacity of the Antwerp auto and truck plant of its Bel-

gian subsidiary, which assembles and sells the cars and trucks of GM's British and German subsidiaries, as well as its U.S. domestic line.

Reason for the poor showing of U.S. cars in the foreign markets, says Ward's Automotive Reports, is that oversized, fuel-gulping American cars are rarely suited to European needs. Europeans want smaller trucks with lower-horsepower engines—vehicles that U.S. factories are not equipped to turn out. One bright spot in the auto export picture is the South and Central American market, which accounts for the greatest part of the demand.

**DARNELL
CASTERS & WHEELS**
GIVE YOU FAR MORE
VALUE PER DOLLAR!



RUBBER TREADS . . . a wide choice of treads suited to all types of floors, including Darnell-prene oil, water and chemical-resistant treads, make Darnell Casters and Wheels highly adapted to rough usage.

RUST-PROOFED . . . by the Udylite process, Darnell Casters give longer, care-free life wherever water, steam and corroding chemicals are freely used.

STRING GUARDS . . . Even though string and ravelings may wind around the hub, these string guards insure easy rolling at all times.

LUBRICATION . . . all swivel and wheel bearings are factory packed with a high quality grease that "stands up" under attack by heat and water. Zerk fittings are provided for quick grease-gun lubrication.

**Darnell Casters and Wheels
Always**

**SWIVEL
and ROPE**

*Free DARNELL
MANUAL*

**DARNELL CORPORATION,
LTD.**

DOWNEY (LOS ANGELES COUNTY), CALIFORNIA
40 WALKER STREET, NEW YORK 13, NEW YORK
36 NORTH CLINTON STREET, CHICAGO 6, ILLINOIS

INSTITUTIONS



RACE VIOLENCE

has its seeds in underground frictions and tensions. One part of league's work, its community services, aims to eliminate causes of tension—before trouble breaks out.

One of the oldest organizations working in the field of race relations, the National Urban League suffers under a misnomer, lacks the flashy successes of its ally, NAACP. For the businessman, though, it's much more likely to have some effect on his way of life.



EMPLOYMENT

is still main area of concern for the Negro.

Urban League

HOUSING is the only commodity where race determines what can and can't be bought. League is working to break down bars to Negro mortgage financing.



main areas' work. Pilot Placement Project, started in 1948, has been responsible for opening some doors to white collar jobs.

Urban League's Line: Bias is Bad Business

In Chicago last week, the men who gathered for the 41st annual meeting of the Mortgage Bankers Assn. found on their convention calendars an entry that seemingly might have fitted just as well on a social workers' agenda. The listing announced a general session—one of five at the MBA meeting—on Minority Housing and Redevelopment; for the first time, a newly set up committee on financing for racial minorities was to make a report to the convention.

All this, if less than headline-making, was a source of considerable satisfaction to a 44-year-old organization that operates under the somewhat vague title of the National Urban League. The league, which long ago cut out for itself the job of working to better the social and economic conditions of city-dwelling Negroes, could take sizable credit for getting the mortgage bankers to look into the problems of minority financing in the first place.

The fact that this was something less than a drama-packed achievement was only typical of the league and its way of doing things.

• **War and State**—The league itself likes to say that in Negro affairs the National Assn. for the Advancement of Colored People is the War Dept. and the Urban League is the State Dept. The distinction explains a great deal, particularly why the NAACP is so much better known, and why so many people are unaware that the Urban League even operates in the area of Negro affairs. Yet the truth is the businessman is much more likely to encounter the league in his personal dealings than he ever is to run into the NAACP.

The Urban League is a national service agency that today has 60 local units scattered throughout the country. More than 90% of its work is with Negroes, and this is concentrated in three main areas: (1) getting more and better jobs

for Negroes; (2) improving their housing conditions; and (3) bettering their health and welfare services and community status.

Where NAACP relies on direct action to advance the Negro—as in its prolonged and bitter court fight that led to victory in the Supreme Court's school-segregation decision last spring (BW—May 22 '54, p25) the league's tactics are study and persuasion, and its main weapon is public opinion. One is militant; one is not.

• **Hewing to the Line**—This somewhat peaceful cloak that the league has worn from its start has been the cause of the main criticism against it—that it has moved too slowly and accomplished too little. Just this summer there was an eruption within its board that resulted in the resignations of two trustees and the firing of its organization secretary; the issue was the policies of the league's present executive director, Lester B.

commodity
etermines
League is
gro mort-

See the "WRITE" of the new
Smith-Corona
 "Eighty-Eight"



Carbon-Ribbon
 TYPEWRITER

For Top Executive Correspondence!

• Not an attachment but built right into the Smith-Corona "Eighty-Eight" Secretarial. You will see and feel the difference in the impressive appearance of every letter, every report and presentation you prepare.



CALL ANY SMITH-CORONA FULL-LINE
 DEALER OR BRANCH OFFICE

(See your Classified
 Telephone Directory)

Smith-Corona Inc Syracuse 1 N Y Other factories
 in Toronto, Brussels, Johannesburg. Makers also of famous
 Smith-Corona Portable Typewriters, Adding Machines and
 Cash Registers, Vivid Duplicators, Carbons and Ribbons.

LEGAL NOTICE

STATEMENT REQUIRED BY THE ACT OF AUGUST
 24, 1912, AS AMENDED BY THE ACTS OF
 MARCH 3, 1933, AND JULY 2, 1946 (Title
 39, United States Code, Section 233)
 SHOWING OWNERSHIP
 MANAGEMENT AND
 CIRCULATION

Of Business Week published weekly at Albany, New
 York for October 1, 1954.

1. The name and address of the publisher, editor, managing editor and business manager is: Publisher, McGraw-Hill Publishing Company, Inc., 330 West 42nd Street, New York 36, N. Y.; Editor, Elliott V. Bell, 330 West 42nd Street, New York 36, N. Y.; Managing editor, Kenneth Kramer, 330 West 42nd Street, New York 36, N. Y.; Business manager, Richard E. McGraw, 330 West 42nd Street, New York 36, N. Y.

2. The owner is: McGraw-Hill Publishing Company, Inc., 330 West 42nd Street, New York 36, N. Y.; Stockholders holding 1% or more of stock: Donald C. McGraw and Harold W. McGraw, Trustees for Harold W. McGraw, Donald C. McGraw and Elizabeth S. Stoltzfus, All of 330 West 42nd Street, New York 36, N. Y.; Donald C. McGraw and Harold W. McGraw, Trustees for Catherine M. Rock, 330 West 42nd Street, New York 36, N. Y.; Donald C. McGraw, Executor of the Estate of Curtis W. McGraw, 330 West 42nd Street, New York 36, N. Y.; Donald C. McGraw, West End Street, New York 36, N. Y.; Mildred W. McGraw, Madison, New Jersey; Grace W. Mehren, 536 Arenas Street, LaJolla, California; Touchstone & Company, c/o Wellington Fund, Inc., Clayton, Del.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.

4. Paragraphs 2 and 3 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is holding the securities. In the two paragraphs show the amount of full knowledge and belief as to the exact circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner.

5. The average number of copies of each issue of this publication sent or distributed through the mails or otherwise to paid subscribers during the 12 months preceding the date shown above was: 255,461.

McGRAW-HILL PUBLISHING COMPANY, INC.

By J. A. GERARDI, Vice Pres. & Treas.

Sworn to and subscribed before me this 14th day of

September, 1954.

(SEAL) ELVA G. MARLIN,

(My Commission expires March 30, 1956)

BUSINESS OPPORTUNITIES
 both offered or wanted; personnel; financing;
 equipment; etc., may be found in BUSINESS
 WEEK's own classified advertising section

clues



CAREER

conferences at all-Negro colleges were started under cosponsorship of the league. GE, in 1949, was first big company to recruit at Negro school.

Granger, and a feeling by the two who resigned that a more militant approach was needed.

Whether this criticism is warranted—and there are many who feel it isn't—the league has chosen to hold with the original concept it started out with in 1911.

The gist of that was that the best way to raise the Negro's status was through broad social and welfare action, rather than through agitation.

From a start in a kerosene-stove New York office, the league has grown to a point where today it operates in 30 states and spends, on the national and local levels, about \$2-million a year. The money comes from gifts—from Community Chests, business, foundations, individuals, and labor unions. All but \$275,000 of it is spent by the local units on local projects (city leagues operate independently of the national organization, but are governed by its over-all policies).

• **For What?**—In terms of staff, at least, the league still puts its biggest single effort into the field of industrial relations. What exactly does it do?

Julius A. Thomas, who heads the industrial relations department and who has been on the league's staff for 30 years, says part of it is simply this: "We tell the businessman we think he's wrong—economically wrong—not to hire Negroes. Further, we tell him we'll show him how to hire them and how to make it work."

The problem that faces the more than 15-million Negroes in the U.S. today (68% of them were still in the South in 1950), is not one of simply getting jobs. It is one of getting jobs outside the traditional Negro work classifications. In the South, the area of competition is extremely limited;

Negroes are excluded from the vast majority of jobs in light manufacturing, from a substantial amount of skilled work on construction, from practically all clerical and technical jobs, and from most professional employment.

In the North, the Negro has had more success in moving into skilled manufacturing jobs, but the doors are still closed to him in most white-collar jobs and in almost all supervisory and management posts.

• **Opening Doors**—What the Urban League wants, of course, is to open some of these doors now and eventually to open all of them. (Its ultimate aim is to go out of business.) The way it has been going about it has involved two approaches.

"Twenty years ago," Thomas says, "we'd take a pot shot here and there at an employer who was discriminating, and try to convince him he was wrong. Today we don't do that nearly so much; now we try to move against an industry as a whole or a group of multi-plant corporations."

Through the league's Commerce & Industry Council, a 17-man group that includes, among others, Frank Folsom of RCA, William Paley of CBS, Henry Luce, and Robert W. Dowling of the City Investing Co., the league has sent out invitations for corporate conferences to discuss employment practices.

Last December, for instance, it brought together 15 multiplant corporations with a total of 50 branch plants in the South employing more than 750,000 workers. All of these corporations committed themselves to work with the league toward an improvement of the numbers and job classifications of their Negro employees.

• **Local Follow-Up**—Though management's intentions may be the best,

How Denison makes a million dollar investment more profitable

ip of the
o school.

vast man-
ufacturing,
f skilled
practically
and from

has had
skilled
doors are
site-collar
factory and

Urban
to open
eventually
mate aim
the way it
involved

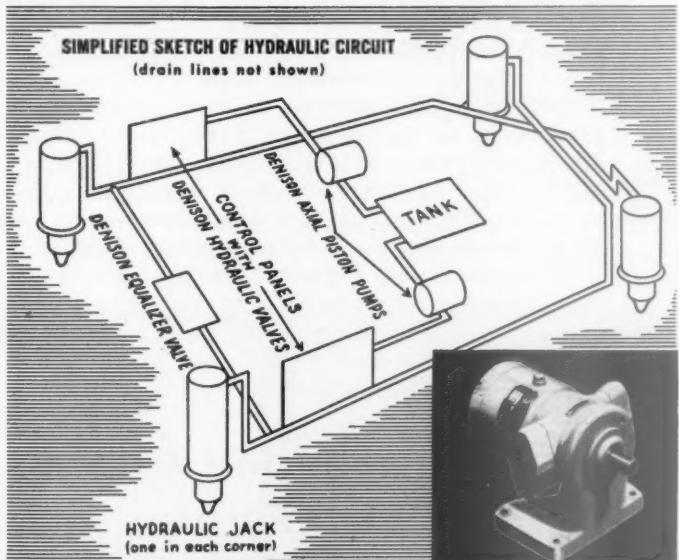
as says,
there at
inating,
wrong-
o much;
an in-
f multi-

erence &
up that
Folsom
. Henry
of the
has sent
confer-
actices.
ence, it
corpor-
plants
e than
corpor-
o work
vement
tions of

management
the best,



CUTS COSTLY DOWNTIME on shovel built by Marion Power Shovel Company, Marion, Ohio. Three-million-pound giant scoops 45 cubic yards of earth in one bite . . . day in, day out.

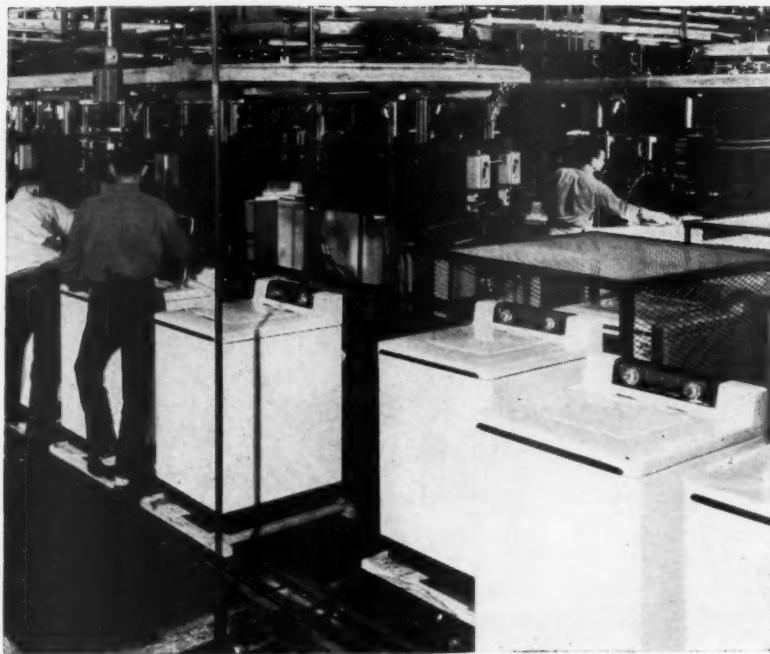


CUTS DESIGN COSTS. Hydraulic jacks, one at each corner of the shovel base, adjusted automatically by Denison Axial Piston Pumps and Controls to maintain level position of base. One Denison pump delivers 20 gallons per minute, another up to 35 gallons per minute . . . at continuous pressures up to 5000 psi.

DENISON
HydroOILics

TRADE MARK
HYDRAULIC PRESSES
PUMPS • MOTORS • CONTROLS





Each unit does a washing without stopping the assembly line

Here's the conveyor system we developed to test automatic washers as they move along the final assembly line.

An overhead conveyor loop, carrying panels with electrical, water and drain connections, parallels the final assembly slat conveyor and travels at the same speed. Washers are hooked to test panels and go through the entire washing, rinsing and spinning sequence without a pause in the line's movement.

Nine out of ten washers get this test, with abbreviated time cycles, on the main line. Every tenth washer is automatically removed to another line, which has its own test loop conveyor. Here washers go through the operating sequence with normal time cycles. As tests end, units are automatically fed into the main conveyor again.

If you are looking for ways to make your operations more efficient and economical, your product more secure competitively, call on our experience in designing and building automatic production.

Call in the MHS engineer.

Mechanical Handling Systems Inc.

AND SUBSIDIARIES

4610 Nancy Ave., Detroit 12, Michigan

Offices in Principal Cities

FACTORIES: Detroit, Mich. • Fairfield, Iowa • Albany, N.Y. • Windsor, Ontario



there is sometimes a great difference between the utterance and the doing. Policies can be made or broken at the plant level. The league's second approach, therefore, is the follow-up, the pressure at the local level to see that what's been decided doesn't get lost.

• **Smoothing the Way**—Once an employer decides to bring Negroes into a new plant or job classification, the league works along to see that the entrance is smooth. It will screen out and refer applicants to him, though most of this referral now is limited to technical or highly skilled spots.

It will brief management on the problems to expect and how best to avoid them. It will say, for instance, that the announcement that Negroes are to be hired should come from the top, and that the reasoning should be stated on firm business grounds. It will advise that supervisory employees be called together, told of the decision, and given a chance to say their piece. Whatever they say, however, must not be allowed to compromise the basic decision.

The problem of toilets is almost sure to come up if the Negro is the first to work in a particular section. The league will give the employer statistics and case-history material to spike talk about high rates of disease incidence.

If the job is a white-collar spot, and the employee a girl, it will point out that a good place for her to start is the personnel department, where everyone coming in sees her.

By the time the league has finished its screening and briefing, it can usually say with assurance that there will be no hitches in the Negro worker's debut. But occasionally tension and friction may develop later on. If it does, the league will move back in—as Thomas did last week in a trip to Indianapolis—to find the trouble source.

• **How Fast**?—At the moment, Thomas can claim some degree of rapport with "about 150 multiplant corporations." In many of these, however, there is little more than a foot in the door—and what foot there is, is only in the North. Despite some notable achievements in the South—the standouts are the International Harvester plants in Memphis and Louisville—the color line is still solid in most of Southern industry. Mainly because of that, Granger labels as "hogwash" the contention that no group in history has made the progress that Negroes have made within the American democratic system.

"Progress," Granger has said, "is a matter of making gains fast enough to take care of the situation as it is at the present time. The question is whether the changes that have taken place in our national racial picture have been fast enough and large enough to keep pace." For Granger, at least, the answer is "not half fast enough."

ince be-
doing.
at the
nd ap-
e that
t lost.
n em-
into a
n, the
e en-
ut and
most of
chnical

le prob-
e avoid
at the
o to be
o, and
ated on
advise
ed to
given
whatever
llowed

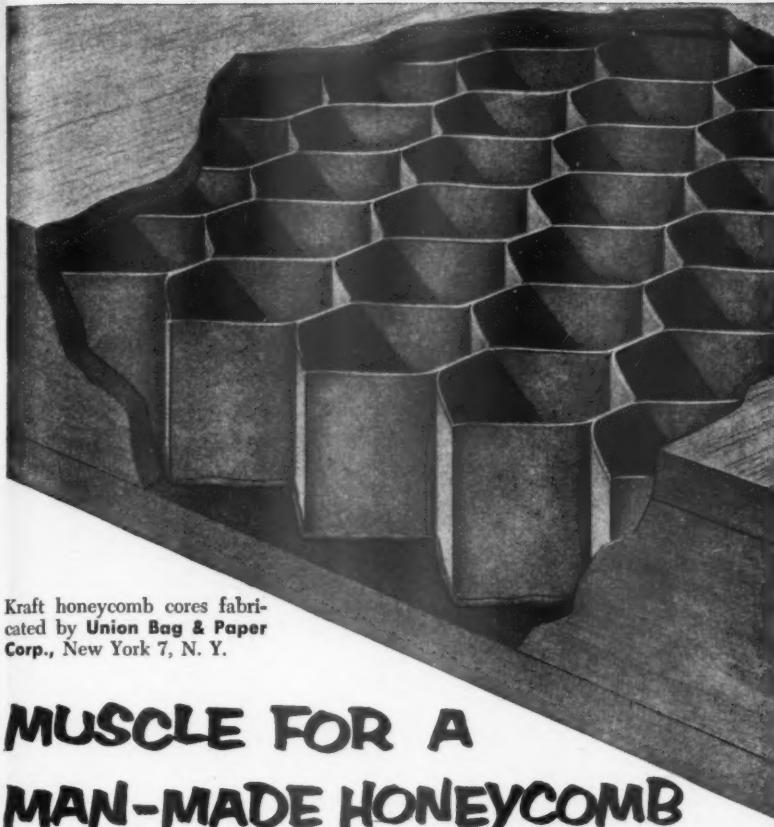
st sure
irst to
league
s and
about

et, and
nt out
is the
everyone

nished
usually
be no
debut.
iction
s, the
thomas
polis-

thomas
t with
sions."
ere is
door-
n the
hieve-
ts are
s in
or line
indus-
ranger
n that
prog-
in the

"is a
gh to
at the
ether
ce if
been
keep
the an-



Kraft honeycomb cores fabricated by **Union Bag & Paper Corp.**, New York 7, N. Y.

muscle for a man-made honeycomb

Honeycomb cores impregnated with BAKELITE Phenolic Resins resist deterioration, chemicals, salt water

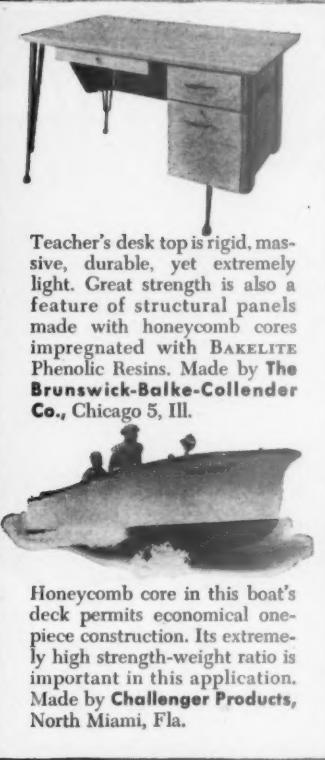
The idea of "honeycomb core" structures is an engineering success taken straight from nature. Cores are made from kraft, fabric, or glass cloth, and sandwiched between sheets of plywood, metal, or reinforced plastics. The resulting structural panels are extremely light, strong, and impact-resistant. Great economy is possible — a conventional lumber core of the same size could cost four times as much as a kraft honeycomb core.

The success of honeycomb core materials depends on their impregnation with BAKELITE Phenolic Resin. Besides holding the structure together, the resin

makes it resistant to decay, attack by insects, moisture, and dimensional change. Since the resin is easy to apply, fabrication is simple.

Honeycomb cores impregnated with BAKELITE Phenolic Resins are used in structural panels for boats, furniture, houses, airplanes, and guided missiles. They permit massive sections with a minimum of weight, demonstrate outstanding mechanical strength under severe operating conditions, and give years of service.

Learn more about honeycomb cores impregnated with BAKELITE Phenolic Resins. Write Dept. ZM-61.



Teacher's desk top is rigid, massive, durable, yet extremely light. Great strength is also a feature of structural panels made with honeycomb cores impregnated with BAKELITE Phenolic Resins. Made by **The Brunswick-Balke-Collender Co.**, Chicago 5, Ill.



Honeycomb core in this boat's deck permits economical one-piece construction. Its extremely high strength-weight ratio is important in this application. Made by **Challenger Products**, North Miami, Fla.

BAKELITE
TRADE-MARK
PHENOLIC RESINS
FOR HONEYCOMBS

BAKELITE COMPANY
A Division of
Union Carbide and Carbon Corporation

UCC
30 East 42nd Street, New York 17, N. Y.
In Canada: Bakelite Company
Division of Union Carbide Canada Limited
Belleville, Ontario



MERCHANTS APPRECIATE strippable poster paints based on BAKELITE Vinyl Resins. Paints produce signs that resist smearing, fingermarks, weather — yet easily strip off enamel or glass. Several colors available. "Peel-Print" distributed by Pacific Compounding & Pkg. Co., Redwood City, Calif.

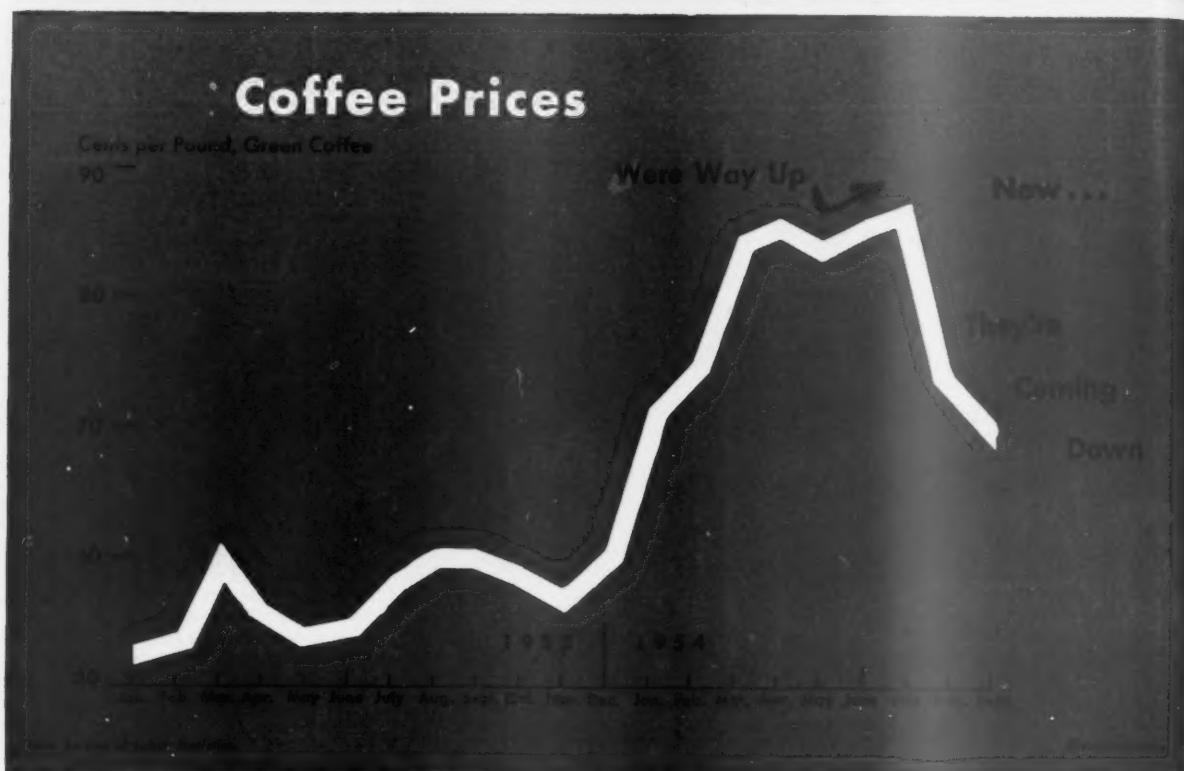


FOIL ENVELOPES are heat-sealable, leak-free with BAKELITE Vinyl Plastic Cast Film laminated to their inner surfaces. Flexible film toughens foil, prevents contamination of contents, won't peel away from envelope walls. Made by **The Dobeckmum Co.**, Cleveland 1, Ohio.



NEW DECORATION IDEA . . . fabrics or natural materials laminated between two BAKELITE Rigid Vinyl Sheets, used as door panels. Sheets are attractive, easy to clean, resist warping, cracking and aging. Lamination, fabrics by **Pan Laminates, Inc.**, N. Y. C., for **Brandt Cabinet Works, Inc.**, Hagerstown, Md.

COMMODITIES



A Year on a Roller Coaster

As this chart suggests, the coffee trade has had a year it will never forget. And, from all reports, the excitement isn't over yet.

Consider this for price fluctuations within a single year:

Green coffee prices (for a standard grade of Brazilian coffee) averaged 60¢ a lb. in October, 1953. By April, 1954, they had shot up 58% to their all-time-high—95¢. Then the market turned erratic. It moved up a little, down a little, day by day. Prices never did get back to the 95¢ mark, but the month of July averaged out at 88¢; the price on Aug. 13 stood at 87¢.

One month later, on Sept. 13, the price was down to 72¢—a 17% drop. Today you can buy Brazilian coffee—if you want it—at around 67¢.

• **Workings**—What happened? Several things:

As retail prices went over \$1.30 a lb., the industry found that, finally and without any doubt, that critical point of "buyer resistance" had been reached. Sales had been high in January and February as buyers stocked up to beat the price rise, but then sales fell sharply and stayed way down. Estimates now

are that sales for this year as a whole will end up about 20% behind last year's.

So, on the one hand, demand was down. On the other, the trade was finding out that supply was a good bit higher than it had been expecting. The crop from Brazil was better than forecast, and crops from other countries more than made up what loss there was from Brazil. Altogether, the world exportable production of coffee for the 1953-54 marketing year came to 33.5-million bags—compared with 32.6-million bags the year before.

• **Brazil**—This kind of situation could only add up to a sharp price drop. The drop would have come much sooner except for one factor. When the Brazilian government set its new minimum export price for coffee last June, it really got ambitious. The price it guaranteed to growers (in cruzeiros) came out to the equivalent of 89¢ a lb., landed in New York.

But coffee roasters here could read the signs as well as anyone else; and, as far as they were concerned, it was no go. Coffee started to pile up in Brazil; dollar earnings fell; and the government

was faced with a huge price support problem.

Over the Aug. 14-15 weekend, Brazil capitulated. It didn't lower the guaranteed price directly, but it did allow coffee exporters to convert 20% of their dollars to cruzeiros at the free market rate. In effect, this devalued the coffee cruzeiro. Since exporters could get many more cruzeiros to the dollar on the free market than they could at the official exchange rate, they could sell the coffee at a substantially lower price.

Coffee is such an important part of Brazil's economic life that it has become inextricably interwoven with politics. Many feel that Brazil's capitulation on the coffee price was one of the things that led directly to President Vargas' suicide—10 days later.

The minimum price, under the new rules, varies slightly with the changing free market for the cruzeiro; at the time of the change it worked out to around 69¢ a lb. in New York. Brazilian shippers are now offering to sell at the equivalent of around 67¢ a lb. in New York—but still without any very great pickup in demand from roasters who

Ask the
man
who
uses
it!



Dealers tell us, "When we sell equipment with a Power Products Engine, we can count on additional sales to that customer's friends and neighbors."

The Lightweight, can help sell your product too!

On the sales floor the differences in engines are not always apparent but "ask the man who uses it." He'll tell you quick "there is a difference."

The Power Products Lightweight engine is specially designed for portable power equipment. All the features . . . lightweight, extreme tiltability, fully enclosed mechanical governor and many others fit it for "on the spot" jobs.

This tremendous acceptance helps sell your product. If you manufacture any portable power equipment Power Products Lightweight can help you improve your product and stimulate sales.

The Power Products Lightweight is your best salesman in a demonstration . . . or in the user's hands. Actually, leading merchandisers tell us they count on Power Products equipped products to produce new orders from that customer's friends or neighbors.

HERE'S THE SALES STORY:



LIGHTWEIGHT —

On an average, most ordinary and even so-called lightweight engines of equal horsepower weigh 50-90% more than the Power Products Lightweight.



EASY STARTING —

Because the 2-cycle engine fires on every stroke instead of every other stroke—pistons are smaller—there is less compression to pull against. In addition, Power Products magneto and carburetor developments produce a hotter spark—more perfect fuel mixture.



EASY MAINTENANCE —

With the Power Products there is only one pre-mixed fuel to add—no messy oil changing or checking. Also, fewer moving parts means less servicing.



Power Products Corporation

Grafton, Wisconsin

support
Brazil
the
guar-
allow
0% of
the free
revalued
porters
to the
in they
e, they
ntinually

part of
as be-
h poli-
pitula-
of the
resident

the new
anging
the time
around
in ship-
at the
in New
great
s who

9, 1954



Do you have one?

SUCH A MAN devotes his full time and energies to "looking ahead". He thoroughly understands the technology of your products and markets, in order to interpret research developments which may expand or shrink that market.

HE MAINTAINS contact with a wide variety of industrial or consumer markets . . . in order to appraise accurately the prospects for new or redesigned products.

HE IS ABLE to direct research and engineering programs to those fields where maximum opportunity for leadership exists, and where maximum profits from sales can be found.

HE OFTEN USES methods of approach outside the company's established pattern of operations, where opportunities exist for drastic cost reduction from design or production methods.

Do you have such a man? If not, Designers for Industry can perform these vital functions of objective analysis and creative development as *your* Vice President in Charge of the Future.

CO-ORDINATED PRODUCT DEVELOPMENT IS OUR BUSINESS

Designers for Industry, through 19 years of organized research and development for a wide variety of clients, has built an unusual organization. Our services include Creative Product Development and also Technical Survey and Product Research facilities for co-ordinated "growth planning". We are

well equipped to act as your Vice President in Charge of the Future, on a part-time or full-time basis. May we give you more information, without obligation? Write for our booklet, *DFI Facilities for Engineering Research and Development*.



Designers for Industry

2915 DETROIT AVENUE • CLEVELAND 13, OHIO

TECHNICAL SURVEYS • RESEARCH AND DEVELOPMENT
DESIGN ENGINEERING • PRODUCTION ENGINEERING

"... to get prices down to the point where people feel they can waste a cup . . ."

COFFEE starts on p. 186

are buying on a hand-to-mouth basis. Since mid-August, various representatives from Brazil have said often and emphatically that there would be no further devaluation of the coffee cruzeiro. But at midweek, futures prices were forecasting a further 15¢ drop by September, 1955.

Retail prices have already dropped some 10¢ to 15¢ a lb. since they hit their peak. But business, according to one leading roaster, is still not at all what it should be: "We would like nothing better than to get prices down to the point where people feel they can waste a cup of coffee."

• **The Panic**—The thing that started all these price gyrations was a sudden and damaging frost in Brazil over the weekend of July 4, 1953.

Reports at that time were that the coffee crop in the major producing areas of Parana and Sao Paulo would be down by more than 50%. But it wasn't until several months later that the trade really started to take the reports seriously—and prices began to spiral upward.

Eventually, the whole situation hit the headlines—and the Congressional committees. About the most tangible outcome of the Congressional attention, so far, has been a Federal Trade Commission report, out in early August, on the coffee industry and the reasons behind the price runup (BW—Aug. 7'54, p 66).

• **Culprits**—The basic point in the FTC report is this: Since no severe coffee shortage actually materialized, the price spiral "cannot be explained in terms of the competitive laws of supply and demand." So the causes must lie elsewhere—and FTC spread the net wide to find the culprits.

The report scored, among others, U.S. and Brazilian crop estimators, for inadequate crop reporting; coffee speculators of both nations; large roasters, for inventory hoarding; and the New York Coffee & Sugar Exchange, for maintaining a "thin" market for futures and for allowing trading irregularities.

Outraged cries promptly came at FTC from all directions. The one basic criticism that you'll hear from many parts of the industry is that FTC based its report on hindsight. From the vantage point of July, 1954, many say, it was easy to see that the price runup that started in the fall of 1953 was not justified by actual conditions of supply and demand. This was not nearly so easy to see however, at the time.

HOW MUCH

OF YOUR PACKAGING DOLLAR



ESCAPES

We'd welcome an opportunity to talk with you about reducing your packaging costs by increasing your packaging machine speeds with faster setting, modern adhesives.

STARCHES

National ADHESIVES
RESYNS®

NATIONAL STARCH PRODUCTS INC. (Adhesives Division)

270 Madison Avenue, New York 16 • 3641 So. Washtenaw Avenue, Chicago 32 • 735 Battery Street, San Francisco 11

clues: TO THE SOLUTION OF MANAGEMENT MEN'S PROBLEMS.

Published—every Saturday.

Closing date—12 days prior issue date, subject to space available.

Rates—\$5.85 per line, minimum 2 lines. Half rate applies to Position Wanted classification only.

EMPLOYMENT

Positions Vacant

Sales Manager Wanted under 38, western company hydraulic equipment, Reply P-4014, Business Week, San Francisco.

Branch Manager—28-45, presently employed seeking greater opportunity with well established Class I Common Motor Carrier in mid-west. Minimum 2 years management experience required. Marital status, 10 years previous employment record and salary expected first letter. Write P-4184, Business Week.

Selling Opportunity Offered

Representative wanted by leading manufacturer of custom made to order picture frames, mirrors and special furniture (wood), to sell to Art Dealers, interior decorators, better furniture and department stores in New York and New England States. Give full details, including specific line you have sold. RW-4150, Business Week.

Employment Service

Executives—Contemplating a change? Your personal requirements met thru our flexible procedures, with full protection of your present position. We have the know-how and nationwide contacts to negotiate successfully for you. Write for details. Jepson Executive Service, (Est. 1939), 1022 Porter Bldg., Kansas City, Mo.

Positions Wanted

Attorney, 36, presently tax attorney with Government, desires position utilizing tax and legal background with corporation in foreign country. Prefer Western Europe, South America or Middle East. PW-4125, Business Week.

College graduate, 30, married, industrial sales experience, seeks opportunity for administrative position. Will travel. PW-4143, Business Week.

Executive trouble shooter. Offer 15 years successful, diversified, executive experience—small and multi-corporate—domestic and international—chemical, pharmaceutical, related industry. Thrive on problems—purchasing, distribution, manufacturing, organization, plant relocation, sources of raw materials. Dynamic, aggressive, creative, personable. Honor graduate, Wharton School, marketing major. Married, 39, no children. Widely traveled. Willing to relocate or travel. PW-4187, Business Week.

Industrial Credit Manager, 32, B.B.A. Five years executive and supervisory experience, initiative, capacity, ability. PW-4183, Business Week.

Knowhow! Energy! Leadership! Industrial relations, marketing, operations, general management. MBA; 42. Bargain Availability, only \$10,000. because flood dislocated. PW-4182, Business Week.

Mr. Chief Executive Officer! Annapolis graduate, Age 34. Requests interview for job as your assistant with opportunity for experience in all phases of operations. Outstanding war record. Several years of achievement in industry. Definitely relocation. Presently in sales management.

Mech. Eng.—27, 4½ yrs. paper mill prod. exp. Consider sales. PW-4185, Business Week.

Replies to Box Numbers

Address to office nearest you
NEW YORK: 330 W. 42 St. (36)
CHICAGO: 520 N. Michigan Ave. (11)
SAN FRANCISCO: 68 Post St. (4)

Business Service Section

Card Advertisements—
Write for Special Rates.

Production Superintendent. Graduate mechanical engineer, experienced in production control, time and motion, cost accounting. Metal fabricating, aluminum and heavy equipment plants. Age 36. For complete information contact Chas. J. Loveless Personnel Service, 616 S. Main, Tulsa, Okla.

Industrial Sales Position desired: Young man (33) college graduate with 9 years' exceptional background in Industrial Sales and Management (cutting tools) desires responsible position with progressive company. Will trade experience, enthusiasm, and hard work for opportunity to advance within organization. Brochure furnished on request. PW-4188, Business Week.

Trade Exposition or Association Position Wanted thorough New England management training. Have sold and managed successful trade and public events with harmonious committee work. Accustomed heavy work load and publicizing event, not self. 39, 17 years experience, veteran, references. PW-4186, Business Week.

Selling Opportunities Wanted Washington, D. C. Representative available. 15 years' experience selling Federal Government, Maryland and Virginia. James F. Hardy, Barr Bldg., Washington 6, D. C.

Manufacturer's Representative desires one very high quality industrial item. Have excellent contacts with metal industry in Minn., Wis., & Iowa. Write RA-4133, Business Week.

SPECIAL SERVICES

Need a market survey abroad? Thorough down-to-earth studies made in any country. Representatives all over the world. For details, write Overseas Business Services, McGraw-Hill International Corporation, 330 West 42nd St., New York 36, New York.

Florida Bound? Palm Beach County acreage investments to suit your portfolio. Indian Trail Ranch, Inc. (a Webb & Knapp Subsidiary) West Palm Beach, Florida.

CAPITAL TO INVEST

Stock Issues, Chattel mortgage, Loans—Increase working capital; Expansion financed. By Field-1008-5th Ave, NYC 28, BU 8-5792.

CHRISTMAS GIFTS

Branded Merchandise for your Christmas Gifts at true wholesale prices: Choose from over 1,000 nationally advertised items including Appliances, Benrus Watches, Parker Pen Sets, Evans Lighters. We have catered to business firms for over 20 years. Write on your letterhead for our new free catalog. O. Faust, Dept. W1054, 223 N. 8th Street, Philadelphia 6, Pa.

BUSINESS SERVICES

PEACOCK CORPORATION

Anhydrous, Ammonia Bulk Plants & Propane Gas Plants installed. Write us for Free Literature. P. O. Box 268, Westfield, N. J.

KEEP "clues" in MIND WHEN LOOKING FOR:

- Employment
- Personnel
- Equipment
- Special Business Service

BUSINESS WEEK

Classified Advertising Division 330 W. 42nd St.—New York 36, N. Y.

COMMODITIES BRIEFS

Mercury prices have soared to a phenomenal \$325 a flask—compared with \$187 at the beginning of the year. The government has been taking huge quantities from Spain and Italy—although what it has been doing with all that mercury is still a mystery (BW—May 15 '54, p54).

The future for uranium: Jesse C. Johnson, director of AEC's Div. of Raw Materials, says that by 1980 industrial demand for uranium might be around 14,000 tons a year, which is equivalent to about 17,000 tons of uranium oxide. "A production rate of 17,000 tons, or even more," he added, "should be available at a price of not more than \$10 a lb."

Anaconda Wire & Cable Co. is getting deeper into the aluminum business by expanding its operations at Great Falls, Mont., with a new aluminum rod-rolling and fabricating plant. The plant is scheduled for completion early in 1955.

Producers of copper, lead, and zinc must face up to increasing competition if they are to keep their share of the market, says Simon Strauss, vice-president of American Smelting & Refining Co. This means keeping prices competitive with other metals and assuring consumers of continued abundant supplies.

Textile imports, long a favorite whipping boy of the hard-pressed textile industry, are beginning to feel the pinch of industry conditions. So far this year, they've been running some 25% behind a year ago.

Margarine production continues to set records. Output in August—and for the first eight months of this year—reached new highs. Annual consumption will average 8 lb. per person in 1954, according to estimates.

The government will support prices on the 1954 corn crop at \$1.62 a bu.—the highest support price for corn to date. However, the Agriculture Dept. has divided the country into "commercial" and "noncommercial" corn producing areas this year; "noncommercial" areas will only get 75% of the full support price. Last year's support price was lower (\$1.60 a bu.). But it applied to the whole country.

Prices for leather hides are running some 20% under a year ago. Reason: peak supplies because of the high rate of cattle slaughter.

to a phe-
ared with
year. The
uge quan-
—although
n all that
V-May 15

C. John-
of Raw
industrial
be around
equivalent
um oxide.
tons, or
ll be avail-
than \$10

o. is get-
business
at Great
um rod-
The plant
early in

and zinc
competition
e of the
ice-presi-
Refining
ces com-
and assur-
abundant

ate whip-
textile in-
the pinch
this year,
o behind

to set
d for the
reached
tion will
954, ac-

rices on
bu.—the
to date.
has di-
"commer-
roducing
" areas
support
ce was
plied to

running
Reason:
high rate

ADVERTISERS IN THIS ISSUE

Business Week—October 9, 1954

ADAMS & WESTLAKE CO.	81	FELT & TARRANT MFG. CO.	138	N. C. DEPT. OF CONSERVATION & DEVELOPMENT	172
Agency—Henri, Hurst & McDonald, Inc.		Agency—N. W. Ayer & Son, Inc.		Agency—Bennett Adv., Inc.	
AIR EXPRESS DIV. OF RAILWAY EXPRESS AGENCY, INC.	24	THE FIRST BOSTON CORP.	72	Agency—Ehrlich & Neuwirth, Inc.	
Agency—Ehrlich & Neuwirth, Inc.		Agency—Doremus & Co.		Agency—Ehrlich & Neuwirth, Inc.	
AIR TRANSPORT ASSOCIATION	125	GARDNER-DENVER CO.	106	OLD TOWN CORP.	59
Agency—Lewis Edwin Ryan Co.		Agency—The Buchen Co.		Agency—Ehrlich & Neuwirth, Inc.	
ALLIS-CHALMERS MFG. CO.	152-153	GENERAL DYNAMICS CORP.	95	OLIN-MATHIESON CHEMICAL CORP.	126-127
Agency—Compton Adv., Inc.		GENERAL FIREPROOFING CO.	115	Agency—D. W. Kitchell & McCormick, Inc.	
AMERICAN AIRLINES, INC.	6-7	Agency—John D. Eshleman Co.		PACKAGE MACHINERY CO.	141
Agency—Rutherford & Ryan, Inc.		B. F. GOODRICH CO.	105	Agency—John O. Powers Co.	
AMERICAN FOREIGN INSURANCE ASSN.	154	SPONGE PRODUCTS DIV.		PATERSON PARCHMENT PAPER CO.	120
Agency—Princ & Co., Inc.		Agency—Conklin Mann & Son		Agency—Platt, Zachary & Sutton, Inc.	
AMERICAN GAS & ELECTRIC CO.	56-57	GOODYEAR TIRE & RUBBER CO., INC.	96-97	PEERLESS PHOTO PRODUCTS, INC.	161
Agency—J. Walter Thompson Co.		Agency—Kudner Agency, Inc.		PHOTOSTAT CORP.	122
AMERICAN HOIST & DERRICK CO.	78	GRINNELL CO., INC.	9	POWER PRODUCTS CORP.	187
Agency—Ehrlich & Ryan, Inc.		Agency—Horton-Noyes Co.		THE PURE OIL CO.	15
AMERICAN PHOTOGRAPHIC EQUIPMENT CO.	171	GUARANTY TRUST CO. OF NEW YORK	123	Agency—Ken Seitz & Assoc., Inc.	
Agency—Irving J. Rosenthal Adv.		Agency—Albert Frank-Guenther Law, Inc.		PYRENE-GETTY	45
ANTI-CORROSIVE METAL PRODUCTS, INC.	159	HAMILTON MFG. CO.	132	Agency—Grae & Rogers	
Agency—Woodard & Voss, Inc.		Agency—The Brady Co.		THE RAYMOND BAG CO.	148
APSCO PRODUCTS, INC.	64	HAMILTON MFG. CO.	163	Agency—Doc Anderson Adv.	
Agency—Julian R. Besel & Assoc.		Agency—Rutherford & Ryan, Inc.		RELIANCE ELECTRIC & ENGINEERING CO. 71	
ARMSTRONG CORK CO.	111	HAMMERMILL PAPER CO.	145	Agency—Medlum & Fawsom, Inc.	
Agency—Batten, Durstine & Osborn, Inc.		Agency—Batten, Barton, Durstine & Osborn, Inc.		REMINGTON RAND, INC.	8, 133
BAKELITE CO., DIV. OF UNION CARBIDE & CARBON CORP.	185	H. M. HARPER CO.	139	Agency—Leeford Adv., Agency, Inc.	
Agency—J. M. Mathes, Inc.		HERCULES POWDER CO.	16	REPUBLIC AVIATION CORP.	19
BALTIMORE & OHIO RAILROAD	50	Agency—Fuller & Smith & Ross, Inc.		Agency—De Garmo, Inc.	
Agency—The B. A. Foley Adv. Agency, Inc.		HEWLETT-PACKARD CO.	49	REPUBLIC STEEL CORP.	149
BANKERS TRUST CO.	1	Agency—L. C. Cole Co.		Agency—Medlum & Fawsom, Inc.	
BARRETT DIV. ALLIED CHEMICAL & DYE CORP.	107	THE HEYER CORP.	160	RESEARCH CORP.	99
Agency—McCann-Erickson, Inc.		Agency—Frank C. Jacob		Agency—Medlum & Fawsom, Inc.	
BAY STATE ABRASIVE PRODUCTS CO.	144	HILTON HUBLEY CORP.	118	REVERE COPPER & BRASS, INC.	173
Agency—Berg-Marshall, Inc.		Agency—Needham, Gruhman, Inc.		Agency—St. George & Keves, Inc.	
BETHLEHEM STEEL CO.	109	HYATT BEARINGS DIV., GENERAL MOTORS CORP.	75	ROHM & HAAS CO. (PLASTICS DIV.)	40-41
Agency—Jones & Brakeley, Inc.		Agency—D. P. Broth & Co., Inc.		Agency—Arndt, Preston, Chapin, Lamb & Keen, Inc.	
BIGELOW SANFORD CARPET CO.	91	INSTITUTE OF INDUSTRIAL LAUNDERERS	51	ROYAL TYPEWRITER CO., INC.	76-77
Agency—Young & Rubicam, Inc.		Agency—Kai, Ehrlich & Merrick		Agency—Young & Rubicam, Inc.	
THE BLACK & DECKER CO.	90	JENKINS BROS.	36	RUDD-MELIKIAN, INC.	66-67
Agency—VanSant, Duval & Co.		Agency—Horton-Noyes Co.		Agency—Gear-Marston Adv.	
BOWER ROLLER BEARING CO.	2nd Cover	JOHNS-MANVILLE CORP.	89	JOSEPH T. RYERSON & SON, INC.	33
Agency—MacManus, John & Adams, Inc.		Agency—J. Walter Thompson Co.		Agency—Calkins & Holden, Inc.	
CHARLES BRUNING CO., INC.	23	JOMAC, INC.	64	SCIENTIFIC AMERICAN	11
Agency—H. W. Kastor & Sons Adv. Co., Inc.		Agency—Gray Rogers Adv.		Agency—Royal & De Guzman	
BULLARD CO.	78	THE LAMB ELECTRIC CO.	10	SHAW WALKER CO.	87
Agency—Paris City Adv. Agency, Inc.		Agency—The Bayless-Kerr Co.		Agency—J. Walter Thompson Co.	
BURRUGHS CORP.	98	THE LAMSON & SESSIONS CO.	80	R. H. SHEPPARD CO.	88
Agency—Campbell-Ewald Co.		Agency—B. F. Goodrich Co.		Agency—The William B. Kamp Co.	
CELANES CORP. OF AMERICA	33	SAMUEL M. LANGSTON CO.	73	SHIPPERS' CAR LINE CORP.	13
Agency—Eckhardt, Inc.		Agency—Gray & Rogers		Agency—French & Preston, Inc.	
CHESAPEAKE & OHIO RAILWAY CO.	116-117	LAYNE & BOWLER, INC.	93	SIER-BATH GEAR & PUMP CO., INC.	74
Agency—Robert Conahay, Inc.		Agency—Rosengarten & Steinke, Inc.		Agency—Thomas & Gill	
CHIVAS BROTHERS IMPORT CORP.	39	LINDE AIR PRODUCTS CO.	135	SMITH-CORONA, INC.	182
Agency—Lynn Baker, Inc.		Agency—J. M. Mathes, Inc.		Agency—Cunningham & Walsh, Inc.	
CLARK INDUSTRIAL TRUCK DIV.		LINK-BELT CO.	177	SONCON-VACUUM OIL CO., INC.	3rd Cover
CLARK EQUIPMENT CO.	65	Agency—Klau-Van Pietersom-Dunlap, Inc.		Agency—Compton Adv., Inc.	
Agency—Marsteller, Gehardt & Reed, Inc.		LOD & BURNHAM.	160	STATE OF COLORADO	168
CLUES (CLASSIFIED ADVERTISING)	190	Agency—Ernest Chabot Adv. Agency		Agency—Axelson Adv., Agency	
COLSON CO.	104	P. R. MALLORY & CO., INC.	42	STEELCRAFT MFG. CO.	12
Agency—Carr Liggett Adv., Inc.		Agency—The Athlone-Kynett Co.		Agency—Rutherford & Ryan, Inc.	
CONVEYOR SPECIALTY CO., INC.	90	MANNING, MAXWELL & MOORE, INC.	34	STONE CONTAINER CORP.	131
Agency—Larson Randall Adv.		Agency—Moore & Co., Inc.		Agency—A. Martin Rothhardt, Inc.	
COPPER ROLL, INC.	140	MARBLE INSTITUTE OF AMERICA, INC.	134	STROMBERG-CARLSON	61
Agency—Oxford & Hart, Inc.		Agency—Moore & Co., Inc.		Agency—Charles L. Rumrill & Co., Inc.	
CROWN CORK & SEAL CO., INC.		MARSHALL INVESTORS, INC.	129	THE STURGIS POSTURE CHAIR CO.	82
Agency—The Clements Co.		Agency—Dorene & Co., Ltd.		Agency—Balo Adv., Agency	
DARNELL CORP., Ltd.	179	MARSHALL STEEL CO.	136	SYLVANIA ELECTRIC PRODUCTS, INC.	151
Agency—Rhee Adv.		Agency—Edgar Walter Fisher Adv.		Agency—Cecil & Presbrey, Inc.	
DEARBORN CHEMICAL CO.	89	MASSACHUSETTS INVESTORS TRUST	164	THILMANY PULP & PAPER CO.	110
Agency—The Buchen Co.		Agency—Doremen & Co., Inc.		Agency—Jack C. Wemple	
DENISON ENGINEERING CO.	183	McGRAW-HILL BOOK CO., INC.	178	THOMAS TRUCK & CASTER CO.	60
Agency—The Griswold-Eshleman Co.		MECHANICAL HANDLING SYSTEMS, INC.	184	Agency—The Biddle Co.	
DESIGNERS FOR INDUSTRY	188	MELLINK STEEL SAFE CO.	140	TIMKEN ROLLER BEARING CO.	4th Cover
Agency—Fuller & Smith & Ross, Inc.		Agency—Blaco Adv. Agency		Agency—Batten, Barton, Durstine & Osborn, Inc.	
DETROIT STEEL PRODUCTS CO.	44	MERCK & CO., INC.	20	THE TORRINGTON CO.	124
Agency—Fuller & Smith & Ross, Inc.		Agency—Charles W. Hoyt & Co., Inc.		Agency—Hazard Adv. Co.	
THE DELL CO.	169	METAL ARTS CO., INC.	162	TORRINGTON MANUFACTURING CO.	82
Agency—Russell T. Gray, Inc.		MICRO SWITCH DIV., MINNEAPOLIS-HONEYWELL REGULATOR CO.	147	Agency—Graceman Adv., Inc.	
F. W. DOODGE CORP.	128	Agency—Heincke, Meyer & Flinn, Inc.		THE TRANE CO.	142-143
Agency—Albert Frank-Guenther Law, Inc.		MISSISSIPPI A. & I. BOARD	114	Agency—Campbell-Mithun, Inc.	
DOWN CHEMICAL CO.	167	Agency—Dixie Advertisers		TRAVELERS INSURANCE CO.	102
Agency—MacManus, John & Adams, Inc.		NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY	150	Agency—Young & Rubicam, Inc.	
DUREZ PLASTICS & CHEMICALS, INC.	100	Agency—Doyne Adv. Agency		UNDERWOOD CORP.	35
Agency—Comstock & Co.		NATIONAL CAR RENTAL SYSTEM, INC.	88	Agency—Marchalk & Pratt Co., Inc.	
DYKEN MFG. CO.	164	NATIONAL DISTILLERS PRODUCTS CORP.	157	UNITED STATES RUBBER CO.	4-5
Agency—Cramer-Krasselt Co.		Agency—Doremen & Co.		Agency—Fletcher D. Richards, Inc.	
EASTERN CORP.	55	NATIONAL MALLEABLE & STEEL CASTINGS CO.	146	U. S. STEEL CORP.	94
Agency—Sternberg & Abbott		Agency—Palm & Patterson, Inc.		Agency—Batten, Barton, Durstine & Osborn, Inc.	
THOMAS HERVY SONS, INC.	136	NATIONAL PNEUMATIC CO., INC.	165	WESTERN ELECTRIC CO.	2
Agency—Rutherford & Ryan, Inc.		Agency—Henry A. Loudon Adv., Inc.		Agency—Cunningham & Walsh, Inc.	
EMHART MFG. CO.	84-85	NATIONAL STARCH PRODUCTS, INC.	189	WESTERN MARYLAND RAILWAY CO.	101
Agency—The Charles Brunelle Co.		Agency—G. M. Basford Co.		Agency—Eckhardt, Inc.	
EMPLOYERS MUTUAL LIABILITY INS. CO. OF WAUSAU	14	NATIONAL TRUCK LEASING SYSTEM	168	WESTERN UNION TELEGRAPH CO.	83
Agency—J. Walter Thompson Co.		Agency—W. S. Kirkland		Agency—Albert Frank-Guenther Law, Inc.	
ENJAY CO., INC.	3	N. Y. STATE DEPT. OF COMMERCE	63	WOLVERINE TUBE, DIV. CALUMET & HECLA, INC.	58
Agency—McCann-Erickson, Inc.		Agency—Batten, Barton, Durstine & Osborn, Inc.		Agency—Charles M. Gray & Assoc.	
EQUITABLE LIFE ASSURANCE SOCIETY OF THE U. S.	174	NORDEN LABORATORIES CORP.	112	ZURICH GENERAL ACCIDENT & LIABILITY INSURANCE CO.	162
Agency—Kengen & Eckhardt, Inc.		Agency—G. F. Sweet & Co., Inc.		Agency—Vaughan, Thain & Spencer, Inc.	
ERIE RAILROAD CO.	70				
Agency—The Griswold-Eshleman Co.					
FAULTLESS CASTER CORP.	48				
Agency—Perin-Paul Co.					
FEDERAL PRODUCTS CORP.	121				
Agency—Hammond-Goff Co.					

Unity Restored

The agreements reached in London by the nine Western nations end the dangerous vacuum created when the French legislature voted to reject membership in the European Defense Community. That action appeared to be one of the biggest victories achieved by the Soviet Union in the entire postwar period, for it seemed destined to wreck the unity of the Western camp.

But the Soviet victory turned out to be remarkably short-lived. Under the terms reached in London, unity has not only been restored but actually strengthened by the new blueprint. It provides for the rearmament of Western Germany, firm British commitments for maintaining military troops and aircraft on the continent, and the pledge of Secy. of State John Foster Dulles that the U.S. would maintain its forces in Europe.

In addition, Italy and Germany will become full partners in the Western camp with the admission of Germany into the North Atlantic Treaty Organization and the inclusion of both these former enemies in an expanded Brussels treaty.

All these moves will make the West much stronger, militarily and politically, than it was before the French defeat of EDC. It must be admitted that the new proposals do not add up to the integrated, supranational plan that was the EDC, but there is no doubt that they provide a real framework for united defense.

The credit for this new program of Western unity can be shared by all the Western powers. Britain certainly deserves special praise for making an unprecedented contribution to European defense. And Dulles is also to be congratulated for his part in stressing the need to stand united at all costs.

Our allies in Europe have been critical of Dulles' blunt honesty in his approach to the problem of unity. When EDC was wrecked, he demanded that the French come up with an alternative or else face the withdrawal of our support. This was indeed blunt, but such an attitude was essential because it was incumbent upon those responsible for smashing one program of Western unity to consider what to put in its place.

Remaining firm on this ground, Dulles spurred the West to end its hesitancy and confusion that only benefited the Kremlin. The steps taken at London represent the beginning of a new program of unity. As Dulles made clear, the more Europe builds on these first stepping stones, the stronger will be our support.

Look South

Since the beginning of World War II, the United States has been the biggest supplier—and the biggest customer—of Latin America. What's more, Latin America is destined to be an even greater market, according to a study by the Chase National Bank. It states that our neighbors to the south constitute "one of the world's fastest growing markets" with population increasing at

twice the world average and productivity increasing at a rapid 3% per year.

The increased demand for goods will not automatically bring increased orders for U.S. industry. That's because European producers, who have begun recapturing their prewar place in Latin America, will step up their efforts. Intense competition is forecast, but with planning and foresight, the U.S. should be able to hold its share of a much bigger market.

One way of increasing business is by manufacturing on the spot. At present, output of U.S. manufacturers represents almost half the value of total U.S. exports in Latin America and given reasonable inducements by our good neighbors, the ratio should increase.

This study provides economic facts and figures on the most important republics in the area. What stands out is that—though the potential for growth and business is present in each case—every country offers different problems and challenges. If these challenges can be met successfully, the Chase study states, the Latin American market "will dwarf anything we know today." This should be ample incentive for American businessmen who want increased trade.

Unions Turn to Politics

Reading the reports from labor union conventions, which are now in season, the impression may be inescapable that they are pro-organized rallies for the Democratic Party. And though all are careful to assert a "non-partisan" approach to politics and an "independence" of party, for all practical purposes they are adjuncts of the Democrats' vote-getting machinery in the 1954 elections.

There is nothing new about this except the degree to which the union-Democrat alliance has hardened. It began 20 years ago when the New Deal and the union chiefs each found advantages in making common cause. It reached a significant point in 1952 when the AFL broke with tradition and for the first time endorsed a major party candidate—the Democratic nominee—for President. That was a bold step. Normally it could have been expected to be followed by a pause, if not a temporary retreat—the laws of politics, like the laws of social development, calling for erratic and uneven movements.

But 1954 finds the unions with even more partisan commitments than 1952 and the reason for that is worth pondering. A tougher year at the bargaining table, yielding smaller economic and institutional gains than they have won for a long time, pushes union leaders into a more open and intensive use of the tactic of politics for advancing toward their unvarying goals. If higher wages for, say, machinists, are hard to come by in negotiations with employers, they may be attained by pushing the national wage minimum up to \$1.25 and making it necessary for employers to raise skilled workers' pay in order to preserve differentials.

In short, as labor finds it difficult to make headway on the economic front, it will step up its drive on the political front.

ing at a

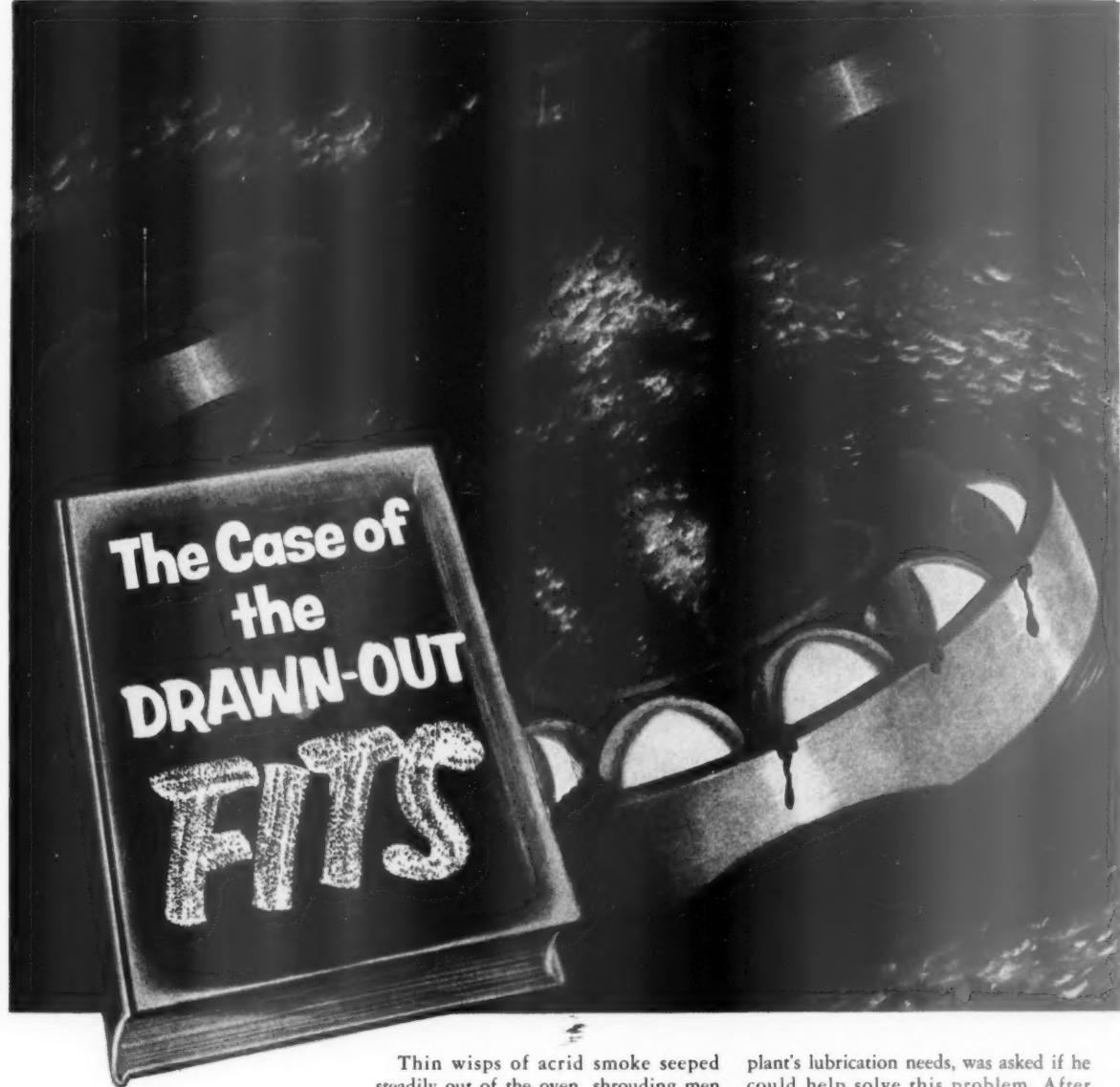
natically
because
ing their
efforts.
ing and
are of a

cturing
anufac-
1 U. S.
induce-
increase.
on the
ands out
ness is
t prob-
met suc-
merican
' This
essmen

ntions,
e ines-
Dem-
"non-
nce" of
of the
ctions.
ee to
ed. It
union
cause.
e AFL
ersered a
ee—for
d have
a tem-
social
ments.
rtisan
worth
yield-
they
into a
ics for
wages
ations
g the
necess-
order

ndway
in the

0, 1954



**How
Correct Lubrication
solved it—and saved
\$5,000 per year!**

Thin wisps of acrid smoke seeped steadily out of the oven, shrouding men and machines in a bluish haze. The smoke caused discomfort but the big trouble with this "shrink-fit" process was that it took too long, cost too much.

A plant making electrical machinery used this process to obtain a precision fit of roller bearings on shafts. First, they heated the bearings in an oven to expand them. Then they fitted the bearings on the shafts and allowed them to cool, or "shrink." Trouble was, grease in the bearings smoldered in the oven, and each part took one to three hours to heat—depending on size.

A Socony-Vacuum man, analyzing the

plant's lubrication needs, was asked if he could help solve this problem. After thorough study, he recommended dipping the parts in hot oil instead of baking them. At a cost of only \$150, a tank with heating coils was installed and filled with the correct Socony-Vacuum oil. The oil was heated to the required temperature and the parts submerged in it for only 15 minutes. This cure worked. The plant saved 48 production hours per week—almost \$5,000 annually—and the smoke nuisance was eliminated.

This is the kind of unsurpassed service you get—at no extra cost—with Correct Lubrication. Use it in your plant to speed production—cut costs.



SOCONY-VACUUM *Correct Lubrication*

FIRST STEP IN CUTTING COSTS

SOCONY-VACUUM OIL CO., INC., and Affiliates: MAGNOLIA PETROLEUM CO., GENERAL PETROLEUM CORP.

Keeping America on the GO...with **TIMKEN** Tapered Roller Bearings



1/3 mile of "Roller Freight" cars to speed Western Maryland shipments

ASIDE from their fresh paint, the fifty new Western Maryland freight cars above look much like ordinary freight cars. But there is a difference railroadmen will spot at once.

It's the bearing journal box at the end of each axle. It doesn't have the usual hinged lid. Instead there's a sealed housing—because these cars roll on Timken® tapered roller bearings instead of old-style friction bearings. They're "Roller Freight"—an important fact to Western Maryland shippers!

These fifty new "Roller Freight" cars will speed deliveries for Western Maryland shippers by eliminating the number-one cause of freight train delays, the hot box. Unlike cars with friction bearings, "Roller Freight" can take high speeds over long distances without danger that a hot box may cripple a car and hold up the whole train.

"Roller Freight" saves delays at terminals, too. The bearing inspection required at terminals takes only a tenth as long for "Roller Freight" as it does for cars with friction bearings. All the inspector does is feel the journal bearing end cap.

Much as "Roller Freight" means to shippers, it can mean still more to the railroads. When they all team together to put roller bearings on all freights they'll save on lubrication, labor and repairs. An estimated total of \$190 million a year!

Timken bearings are designed and precision manufactured to have true rolling motion. To insure their quality we even make our own steel, the only U. S. bearing maker that does. That's why only Timken bearings roll so true, have such quality thru-&-thru. The railroads, like all industry, choose Timken

bearings to keep America on the go. The Timken Roller Bearing Company, Canton 6, Ohio. Cable address: "TIMROSCO".



These are the two Timken bearings that go inside the journal box on each end of a freight car's axles to eliminate the hot box problem, cut maintenance costs.

Only **TIMKEN** bearings roll so true, have such quality thru-&-thru

COPYRIGHT 1954 THE TRB CO.